

UC SOUTHERN REGIONAL LIBRARY FACILITY



G 000 083 232 9





THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA
LOS ANGELES

A. T. Ridgway Esq

PAPERS RELATING

TO

THE RESIGNATION

BY

MR. J. TROUNSELL GILBERT

OF THE OFFICES

OF

SOLICITOR-GENERAL & JUDGE-ADVOCATE,

WITH

EXPLANATORY REMARKS.

GEORGETOWN, DEMERARA :

PRINTED AT THE "CREOLE" OFFICE, AMERICA-STREET.

1863.

ABSTRACT TO VIKI
21 10 11 20 11 A
19 08 11

TABLE OF CONTENTS.

Explanatory Remarks	...	..	...	Pages v to xxi.
Conversation between the Governor and Mr. Gilbert	...		...	xxii. to xxv.

In the pages 3 to 93 —

The Papers numbered 1 to 56 are Correspondence between the Governor and Mr. Gilbert.

Those marked A to L are Correspondence between the Governor and the Secretary of State, and the former and Mr. Smith, then Attorney-General.

Those marked 1A to 7 A are Mr. Gilbert's letters to the Secretary of State.

Letter a is a letter from Mr. Walker, when Lieutenant Governor in 1857, to Mr. Gilbert.

Letter b is an Extract Minute of the Court of Policy dated 22nd Oct., 1857.

Letter c is a letter dated 25th November, 1862, from Mr. Gilbert to Mr. Smith, then Attorney-General.

Letter d is the answer of Mr. Smith.

Letter e is a letter dated 29th April, 1863, from Mr. Gilbert to Mr. Winter.

Letter f is Mr. Winter's answer, dated 30th April.

The order in which these Papers come in pages 3 to 93, is as follows:—

Nos. 1 to 16	...	...	...	...	Pages 3 to 28.
Letters c and d	...	...	...	...	29
Letters A to L	..	...	...	...	30 to 35.
Nos. 17 to 20	...	...	...	...	35 to 38.
1 A	...	...	...	...	38-9.
Nos. 21 to 23	...	..	...	..	39-40.
2 A	...	..	...	...	40 to 53.
Nos. 24, 25	...	...	...	...	53 to 55.
3 A	..	...	..	...	55-6.
Nos. 26 to 31	...	..	...	..	56 to 62.
4 A	..	...	..	...	63
Nos. 32, 33	...	..	...	...	63-4.
5 A	...	...	...	...	64.
Nos. 34, 35	..	...	...	...	65.
6 A	..	...	...	..	65 to 70.
Nos. 36 to 51	..	..	..	...	70 to 87.
7 A	...	..	..	...	87-8.
Nos. 52 to 56	...	...	...	...	88 to 90.
Letters a, b, e, and f...	..	...	..	..	90 to 93.

ERRATA.

In page vii, line 13, for "tenderness of point," read "tenderness of point "

line 37, for "two" read "ten."

viii, line 16, for "attached" read "attach."

x last line, after "confidence" add "to my brother."

xvii, line 37, for "fact" read "truth "

xviii, line 31, after "recurred" insert "to "

xxiii, line 29, after "struck" insert "him."

xxiv, line 26, for "as" read "or "

last line of note for "as" read "or."

4, line 50, for "individual" read "individuals."

51, line 2, for "His" read "Him."

52, line 36, for "held" read "hold."

63, line 2, for "as removal" read "as a removal."

line 37. between "His Excellency" and "the Governor
Secretary" insert "through "

The number of *errata* is owing, not to any carelessness of the printer, but partly to the illegibility of the manuscript, and partly to hurry in the correction of the press

J. T. G.

11th May, 1832,

EXPLANATORY REMARKS.

For the information of many friends to whom I am greatly indebted for their kindness and confidence, I publish the following papers, shewing the circumstances which led to my resignation of the offices of Solicitor-General and Judge Advocate of the Georgetown Militia, which I lately held.

The first paper—which should be read at once, and before going any further into these Remarks—is a memorandum of a conversation between His Excellency the Governor and myself on the 5th of November, 1862. I had good reasons for adopting the precaution of making this memorandum; and the prudence of the proceeding was subsequently verified.

The other papers—shortly described in the Table of Contents, and consisting almost entirely of Correspondence—may be read either before, or as reference to them occurs in the course of, these Remarks.

I shall commence with some observations on certain parts of the conversation which are not noticed in the Correspondence.

First, I will very briefly advert to His Excellency's inference of my hostility to him. Comment on this is needless. If the subject could be treated seriously, I might say, that the adoption of His Excellency's mode of reasoning would have the effect of debarring a public officer from all intercourse with any of his private friends with whom His Excellency might be pleased to get up a difference. Such a result, under existing circumstances, would have a curious effect on social relations in this Colony. The ludicrous aspect of the question is too striking to require illustration.

The second and only other point not mentioned in the Correspondence, to which I will direct attention, is His Excellency's statement, that he had heard that I had drafted a letter signed by three of the partners in the firm of S. A. Harvey and Co., and addressed to the Court of Policy. I did not choose to have my attention diverted from the inquiries which I was pressing on the

Governor, and I made no reply to his allusion to the letter. But the facts regarding this letter are as follows:—

On the 5th of June, a Report of the Comptroller of Customs relative to the seizure of some smuggled herrings which had been concealed in a back store of Messrs. Harvey and Co.'s premises, was brought before the Court of Policy for consideration. The Governor, who was the only person in the Court not well acquainted with the gentlemen who then composed that firm, chose to open the discussion by saying—"He thought it a desirable thing to know what Messrs. Harvey had to say in defence of themselves, for it was a very suspicious circumstance, and from what he had heard strong suspicion attached to them."

He subsequently, and after some observations from Mr. Bascom, used some modifying expressions; but it was impossible to get over this, that he stated, that *from what he had heard*, strong suspicion attached to Messrs. Harvey and Co. Three members of that firm were then in the Colony; one is a brother of mine, the other two are my very intimate friends. The senior partner in the firm, who was then absent, is the oldest and most intimate friend that I have in the Colony. To all of these men, the insulting and reckless imputation of the Governor would have been intolerable, if they had considered that any body would have believed it. I drafted the letter which they sent in when the matter was referred to them. Doing it, of course I never thought of concealing it, and I was always prepared to justify it. To my mind, the letter was extremely moderate. They said in reference to the Governor's observations:—"We have entered into this long explanation merely for the purpose of clearing our wharfinger, and of exposing the onesidedness of the statements made against him, for we cannot suppose that anything that has occurred has in any way affected our own characters. And this we say, notwithstanding that we observe, that by the newspaper accounts of what took place in the Court when the report of the Comptroller was brought forward, His Excellency the Governor appears to have said—'He thought it a desirable thing to know what Messrs. S. A. Harvey had to say in defence of themselves, for it was a very suspicious circumstance, and from what he had heard, strong suspicion attached to them.' We do not believe that such remarks can do us any injury; but we must take leave to affirm, that any information that His Excellency may have received, on which such an imputation could have been founded, is false. As the information is avowedly hearsay, the particulars of which are not disclosed, we have no other means of con-

“tradicting the statements which may have been made to His Excellency.”

If the Governor had heard anything, the falsehood of the information attached to his informant. Unfortunately for His Excellency, the fiction was in his statement that he had heard anything on which to found his remarks, for he subsequently, on the 9th July, admitted that he had never *heard* anything at all, and that he knew nothing of the circumstances except from the Report of the Comptroller of Customs and the papers attached to it. He endeavoured at the same time to deny the correctness of the Newspaper Report as to what he had said on the 5th of June. But the attempt was of no avail. It was no acuteness of point in the letter, but the tenderness of ^{the} point touched, that was the cause of His Excellency's soreness.

I come now to that part of the conversation which afterwards became a subject of Correspondence between the Governor and myself.

The persons who were purveyors to His Excellency of the unfounded statement against me relating to Mr. Winter's Memorial, are Mr. J. P. Cuckow, who in October last was a Clerk in the office of the Auditor General, and Mr. W. B. Pollard, the Auditor-General, (who from the 23rd of August to the 7th of December acted as Government Secretary also.) The former was the originator of the statement; the latter conveyed it to His Excellency. Information which reached me, without any inquiry on my part, and entirely by accident, about the middle of December, was the source of my knowledge as to the identity of these persons; and I have since received absolute assurance on the point. His Excellency in his conversation with me spoke of them as occupying very different positions; in his eulogium on them in his letter of the 15th of November, and subsequently in our Correspondence, he somewhat inconsistently awards them equal merit. I leave the readers of these papers to form their own opinions as to the credit attaching to them respectively.

I shall not dwell on the details of the Correspondence. I shall give a mere sketch exhibiting the most prominent points of it. I waited ~~ten~~^{seven} days after the conversation, and I then wrote to the Governor, (No. 1.) asking for the names of his informants. They were refused (No. 2.) I stated that I deemed myself at liberty to make known what had passed, especially for the purpose of obtaining the information that I sought (No. 3.) The reply (No. 4) contained these words. “His Excellency is of opinion “that you are not justified in making known what passed between

“him and you during a private conversation, without his express permission, which he is unable to grant you.” This appears to assume that what had passed would be made known by me, and to be a mere protest on his Excellency’s part; and I could scarcely infer from this communication that His Excellency intended to adopt the peremptory tone which marked the next communication that I received from him.

My rejoinder (No. 5) was as follows.—“I must very respectfully state that in my judgement none of the characteristics of a private communication attached to what has passed between Your Excellency and myself on the subject in question; and this is the reason why I have not asked permission, and why I must still assert the right, to make the matter known as I may consider necessary.” The Governor’s next communication (No. 6) contains this passage:—“But your remarks with reference to the conversation which His Excellency held with you on the 5th instant, leave him no option but to lay his commands on you formally not to make any use of what passed during that conversation.” I quote these passages at length for the purposes—1stly, of showing—as the further Correspondence also shows—that the Governor placed his objection to my disclosure of what had passed between us on the ground that the conversation was a private one; and 2ndly, of pointing out that I never asked any leave or sanction whatever of the Governor to pursue the course that I announced my intention of pursuing; but that on the contrary I asserted my right, in direct opposition to the opinion which he expressed. A comparison of the passages quoted above with his second communication to me on the 23rd February, 1863, (No. 42,) will demonstrate how completely he afterwards shifted his ground, and how utterly unfounded are the suggestions which he makes and the inferences which he seeks to establish in that letter. In my letter, No. 7, while declining to obey the Governor’s commands, I endeavoured to induce him to recede from the position which he had taken up. In his next communication, (No. 8,) the Governor proposed on certain terms “to lay the whole matter before the Secretary of State.” What construction he subsequently chose to put on his own expression “the whole matter,” will appear further on. He also made a statement with respect to what had passed between us in conversation, the incorrectness of which is pointed out in my letter No. 12. It was at this point that I found the advantage of having made a memorandum of the conversation.

Of the Governor’s “most confidential advisers,” referred to in the letter No. 8, one was Mr. Pollard—the impartiality of

whose advice might certainly under the circumstances be considered open to some slight suspicion—and I know that another was Mr. Smith, the Attorney-General, of whom I shall say nothing. I am not aware whether any other persons were included under this term.

The proposal to submit the matter to the Secretary of State was one to which I could not otherwise than accede. At this stage of the Correspondence, I determined to ask from the Governor an explanation, the propriety of demanding which I had been revolving in my mind ever since our conversation on the 5th. I had heard that His Excellency had expressed an opinion, and in writing, that either the Attorney-General or myself must have furnished information to serve for the foundation of some part or parts of one or both of Mr. Winter's Memorials. My intelligence was merely to this vague effect. But from the way in which I heard it, I felt sure that something of the sort had been stated by the Governor; and the profession of frankness and candour which he made at our interview entitled me to expect a straightforward answer to any enquiry that I might make. It will be seen that I got no answer at all, unless a covert insinuation can be considered an answer to an open inquiry. On the 18th of November I had, with a view to making the inquiry, borrowed from Mr. Winter a copy of each of his Memorials; and in my letter No. 9 I made the inquiry. The Governor's communication in reply (No. 10) conveyed what I could only construe as an insinuation of co-operation on my part with Mr. Winter in the framing of his Memorials. But I was unwilling to accept it as such, feeling sure that the Governor did not in reality believe anything of the kind, and I accordingly wrote the letter, (No. 11,) in which I asked for an explanation. His Excellency, by way of reply to my request, refused me all explanation (No. 13). In the same communication, he announced his intention not to comply with my request for a copy of his Despatch to the Secretary of State; and as he was aware that in approaching the discussion of Mr. Winter's Memorials I was advancing on ground that it would not be safe for him to tread, he expressed an opinion that the Correspondence should be brought to a close. The close of the Correspondence at this point was not more agreeable to me than was the expression of his intention to conceal from me his Despatch to the Secretary of State. I both subsequently persisted in my request for a copy of the Despatch, and immediately insisted on going into this matter relating to Mr. Winter's Memorials, for these reasons:—I had a perfect recollection of a letter of the Governor to the

Attorney General, dated the 7th of July, and making the most candid profession of the terms in which His Excellency proposed to write to the Secretary of State on a certain subject, and a vivid remembrance of the widely different, the almost entirely opposite, terms in which His Excellency, without giving any warning to the Attorney-General, did write to His Grace the next day. Accordingly, on the 29th of November, I wrote to the Governor my letter No. 16, setting forth at length certain particulars relating to Mr. Winter's Memorials, to which it occurred to me as possible that His Excellency might, in what I had heard that he had stated, have intended to refer. To the matters contained in this letter, and to the copies of the Correspondence (Letters A to L) immediately following, I would draw especial attention, as showing what His Excellency considers fair and candid dealing with public officers, even with one in the confidential position of Attorney-General. The peculiar moral obliquity of His Excellency's conduct, as displayed in these proceedings, certainly made me apprehend, that he was capable of broadening into a charge against me to the Secretary of State the insinuations which he had put forward in his letters to me, and that he might do this while professing to submit only an altogether different matter to His Grace. No touches of mine could heighten the effect of the views which His Excellency himself displays of his own double-dealing and the coercion which he assumes a right to exercise over public officers—even in cases where their characters would be compromised by their submission to his dictation—or could bring out in stronger relief the very striking features of the alliance between himself and Mr. Short.

My letter No. 16 shows beyond all doubt that the Governor's insinuation against me—which I am quite sure he himself did not believe—is utterly without foundation. I had never breathed a word (except in consultation with the Attorney-General and Mr. Campbell) to anybody but my brother, on the subjects to which I referred as the only possible ones to which the Governor, in imputing it to the Attorney-General or myself that one or the other of us must have given some information, could have meant to point. And my mention of them to my brother was made under the circumstances stated, and before the occurrence of the events out of which Mr. Winter's Memorials arose. I may observe here, that the Attorney-General, who confided in me—and not the Governor, with whom I had nothing to do in the matter—was the only person who had any right to ob-
ject to my extending the confidence ^{to my brother}; and that I had excellent rea-

sons for knowing that the Attorney General would have no such objection. My brother not only assured me—which was unnecessary—but in copying (as the Governor knew that he copied) my letter to His Excellency, thereby virtually affirmed, that he never gave Mr. Winter or any other person any inkling whatever of what he knew, and that all that appeared in the Memorials was what he was instructed by Mr. Winter to state exactly as it is therein set forth. And independently of all assertion, the statements in the Memorials, when compared with the real details, show that my brother, in setting down what was told him by Mr. Winter, most carefully abstained from stating anything within his private knowledge.

This is all that, and more than, it is necessary for me to say on this point, for the satisfaction of the persons to whom I shall distribute copies of these papers; but as they may fall into the hands of strangers, and as the version (though I doubt its correctness) which the Governor communicates to me on the 9th of March (No. 51) of a Despatch which he states that he had received from the Secretary of State, contains an insinuation that Mr. Winter knew something either from me or my brother, and a statement—which the author of it, whoever he may have been, must have known to be unfounded—to the effect, that my brother did make use of information which he had derived from me, I append hereto a letter which I wrote to Mr. Winter, and Mr. Winter's answer (letters e and f). And on this subject I shall say no more at present.

After meeting voluntarily, openly, and boldly, as I had done, a charge at first privately made, and afterwards persisted in by a covert insinuation, and after giving the frankest exposition of the matter, and conclusively showing that I had been treated with gross indignity, I had a right to expect, and from most men I should have confidently expected, some reparation. From Mr. Hincks I received none; and I candidly confess, that from previous knowledge and experience, I scarcely entertained any very sanguine hope of receiving any; and that the main object of my writing so fully and clearly was to invalidate the effect of any misrepresentation of the matter that might be made to the Secretary of State in the Governor's statement of the differences between himself and me.

From the letters Nos. 17, 18, 19, 20, and 21, it will appear that I persisted in not taking the initiative with the Secretary of State, and that the Governor forwarded to His Grace a Despatch and a portion of the Correspondence between us on the 8th of De-

ember. On the 8th, I also addressed to His Grace a letter (1 A), requesting him to suspend his judgment until the receipt of a representation from me, to be forwarded by the next Mail.

On the 19th of December I forwarded a representation to the Secretary of State (2 A), and on the 22nd, I sent for transmission the papers therein mentioned, namely, the Correspondence Nos. 1 to 22, and letters A to L, and the papers a, b, c, d; and on the latter date I also forwarded another letter to the Secretary of State (3 A), and the Correspondence Nos. 23, 24, and 25. In my letter of the 19th, I could not avoid dwelling on the fact that the Governor had refused me a copy of his representation against me. There can be no doubt of the unfairness in the abstract of such a refusal, and I felt the disadvantage of it, especially when I remembered the course pursued by the Governor in relation to the Attorney-General in July last. The versions, such as they are, which the Governor has since furnished to me of the Duke of Newcastle's Despatches, confirm the suspicions that I always entertained of the unfairness of the representations against me, which I had no opportunity of answering; and they would, supposing them to be correct, furnish convincing proof that His Grace had trusted to the Governor's representations and had not read the whole of the papers.

The next point in the Correspondence between the Governor and myself to which I shall advert, is the question as to whether Mr. Smith, having been provisionally appointed Chief Justice, was still Attorney-General as well; but only in a state of inability to act; so that I, or any other Barrister specially appointed, might, on the score of such inability, under Section 92 of Ordinance No. 27 of 1846, and for all the purposes of that Ordinance, discharge the duties of *his* (that is, Mr. Smith the Attorney-General's) *office*. This question is fully discussed in the Correspondence Nos. 29, 30, and 31, and I shall say no more about it here. It will be observed that on a purely legal question the Governor is pleased to express a most assured and authoritative opinion in opposition to mine. And as regards a former occurrence, he writes in the following terms:—"His Excellency finds on inquiry that in the year 1856 the Governor issued a special commission to you to act for the Attorney-General, who was then employed on other duty by direction of the Governor, who apparently considered himself the proper authority to decide as to the question of 'inability to act.'" I understand what was meant by this. He sought to have it implied that I would submit to the dictation of Sir Philip Wodehouse on a

question of this sort, but not to his. I notice this attempt at an implication against me as characteristic of His Excellency, who, though he chose to put it forth, could not possibly have doubted, that, admitting the office of the Attorney-General to be occupied—as it was on the occasion to which he referred—I should have accepted his intimation of the officer's "inability to act" with the same acquiescence as I had received a similar intimation from Sir Philip Wodehouse.

My letters to the Duke of Newcastle on the 5th, 7th, and 20th of January, 1863, (4 A, 5 A, and 6 A,) and the Correspondence Nos. 32, 33, 34, 35, 36, 37, 38, and 39, require no comment.

I come now to a part of the Correspondence, the Governor's perversions of fact in which are so easily exposed, that it is wonderful that he should have ventured on them.

The Mail arrived on the 22nd of February. On the morning of the 23rd, I wrote to ask the Governor if he had received any Despatch from the Secretary of State on the subject of the papers transmitted on the 22nd of December. I might have made my enquiry more exact; but the Governor—by subsequently resenting, as an imputation on himself, my inference that the contradiction between his two conflicting answers to that letter arose from the inexactness of my enquiry—showed that he perfectly understood my meaning. As I have said, I received two conflicting answers.

The first (No. 41) reached me about 11 o'clock; the second (No. 42) an hour later. The first stated that no such Despatch as I had specified had been received; the second, that a Despatch had been received conveying the opinion of the Duke of Newcastle on a point raised in one of the most important of these papers, namely, my letter of the 20th of November (No. 7). The first letter passed through the Government Secretary's Office in the usual official way, and was numbered and addressed by a clerk. Any casual inquiry addressed to a person in the office, as to whether a Despatch relating to my differences with the Governor had been received from the Secretary of State, might, without any breach of confidence on the part of such person, have been answered in the negative. This letter contained a misstatement of fact, intended, I believe, to go abroad. The second was written and addressed by the Government Secretary himself, and was not numbered. Of it nobody but the Government Secretary knew anything—and Mr. Walker having returned to the Colony, the Government Secretary was a person to be relied on. One part of the second letter di-

rectly contradicts the first. It is true that in the subsequent Correspondence the Governor endeavours to make out that I was asking whether there had been any reply to my letter to the Secretary of State, and that what he meant by the first communication was, to answer that inquiry in the negative; and that the second referred to the Duke of Newcastle's reply to the Governor's Despatch forwarded on the 8th of December. But my inquiry was whether any Despatch had been received "on the subject of the papers transmitted on the 22nd of December;" one of the most prominent of those papers was the letter containing the refusal to obey His Excellency's commands; the first answer followed the express terms of the inquiry, and was in the negative; and it was only after the discrepancy between the two letters was exposed, that it was pretended that I had asked whether there was any *reply to my letter* to the Secretary of State, dated the 19th of December. But the second letter itself is full of statements directly opposed to the real facts. It appears by subsequent communications from the Governor, that he considered this particular one conciliatory. That is, if I had chosen to fall in with suggestions, acquiescence in which on my part would not only have put me altogether in the wrong, but would have amounted to admitting that I had pursued a course directly opposite to the one which in reality I had adopted, the Governor would not have been averse to a reconciliation. He designates as "instructions" the commands which in his letter of the 19th of November he had laid on me in the most offensively authoritative manner; he professes a desire to avail himself of the first suitable opportunity afforded him of disclaiming the slightest wish to interfere with any inquiries which I, on my own responsibility, and in the exercise of my own discretion, might think proper to institute on the subject of his conversation with me on the 5th of November; and he expresses a hope that I will yet perceive that the difficulty arose from my inviting his sanction to my inquiries at a time when I was aware that he had decided on refusing me all aid in obtaining information on the subject. And the Governor deliberately writes all this to me, when the facts, as shown in the early part of the Correspondence, are—that I asked for the information as a matter of right; that he refused it; that I, from mere candour, stated that I deemed myself at liberty to make known what had passed on the subject, especially for the purpose of obtaining the information; that he, on the express and single ground that the conversation was a private one, stated his opinion that I should not be justified in making known what had passed at it without his

express permission, which he declared himself unable to grant me; that I denied that any of the characteristics of a private conversation attached to what had passed between him and myself, and gave this as the reason *why I had not asked permission*, and why I asserted the right, to make the matter known as I might consider necessary; that thereupon he laid his commands on me formally not to make any use whatever of what had passed during our conversation; and that in a communication of the 21st of November (No. 8), he stated that my knowledge of the matter was derived from him alone, and that he felt it his duty to maintain his right to require that communications made by him to the officers serving under him should be deemed confidential. It seems to me that broad facts—such as appear by the Correspondence quoted—and naked statements—such as are to be found in the Governor's second communication of the 23rd of February—can not more essentially differ.

But he further states that he had never been able to reconcile the expression in my letter of the 17th November, "I deem myself at liberty to make known what has passed on the subject," with my subsequent refusal to acknowledge his authority to give any instructions in the matter.

Now, this is a garbling of extracts, and keeps out of view the express disavowal in my next letter of any request for permission; but, moreover, it seems to me that any one but a person determined wilfully to distort the plain meaning of words must admit that the natural consequence of a man's asserting that he deemed himself at liberty to do a thing, would be resistance to a command not to do it.

The rest of this communication is of a piece with what I have quoted. Near the conclusion, the Governor assumes that I would have taken "proceedings" against his informants. This assumption is not only unwarranted, but is contradicted by what I had said to him on the subject, and is only put forward as a foundation for the inference which he seeks to draw, namely, that as he could not sanction "such* proceedings," he was therefore very reluctantly compelled to assume the position of prohibiting inquiries of which he would have desired to hear nothing. The different stages of opinion of the Governor in this matter are as follows:—First, he says our conversation was a private one, and that for this reason I have no right to make known any thing relating to it without his express permission, which he refuses me. Next, on

* What meaning has "such?"

my dissenting from this, he lays his commands on me not to make any use whatever of what passed during that conversation—which, as he afterwards necessarily admits, is a prohibition of all inquiry; subsequently he maintains his right to require the communication to be confidential; and, last of all, after the lapse of three months, His Excellency intimates that I might have instituted inquiries that must have had the effect of making public this communication so private and confidential, and fenced round not only with his opinion but his command—if only I had on my part adopted the privacy of concealing my proceedings from him.

To my letter of the 24th, (No. 43,) in reply to the Governor's communication of the 23rd, (No. 42,) I would direct particular attention. The subject of it requires no further comment.

The conciliatory meaning which the Governor attached to the letter No. 42 appears from his next communication (No. 44.) There are some passages in this which I must quote. One is—“His Excellency, in the hope that you would appreciate the conciliatory spirit in which he wished to act, directed me to point out to you, that he had never entertained any wish to obstruct your inquiries on the subject of his conversation with you, but that by volunteering to acquaint him with your intentions, you had placed him in a false position, and had compelled him to refuse permission to you to make use of your conversation with him.”

Now, the Governor has undoubtedly several times in the course of our Correspondence been placed in a “false position;” but by himself, not by me. Without adverting to others, one false position was, insisting that our conversation was private and issuing his commands on that ground; another was, ignoring this position, and assuming another, almost more untenable for this reason, that the former, though it might be supported by no opinion but his own, was still matter of opinion, while the latter could not possibly withstand the force of the facts opposed to it. Then, as to my volunteering to acquaint him with my intentions, who can doubt—whatever the Governor may have chosen latterly to say—that, bearing in mind the opinions which he at first professed as to the private character of the conversation, and looking at his mode of dealing with me throughout, he would have made it a grave charge against me if after his refusal to give me the information, I had, without acquainting him with my intentions, sought for it myself in the manner indicated?

The other passages which I shall quote from this letter are the following:—“The Governor had hoped that you would have

“perceived that the true solution of the difficulty, assuming, as he
 “was bound to do, that you still desired to follow out your origi-
 “nal design of making use of this conversation, was to withdraw
 “your letter of the 17th November, or such portion of it as His
 “Excellency considered objectionable. Such a withdrawal would
 “have enabled His Excellency likewise to withdraw the instruc-
 “tion or command which he laid on you not to make use of that
 “conversation.

“There is one other passage in your letter to which the Go-
 “vernor has directed me to reply. It is that where you remark,
 “that if instead of refusing you permission on the 17th November
 “to do what you had claimed a right to do, the Governor had re-
 “plied in the terms of my letter of the 23rd instant, no difficulty
 “would have arisen. The Governor does not venture to hope
 “from the tone of your Correspondence that he shall be able to
 “convince you that you could have committed an error; but he
 “directs me to point out to you, that you rendered all explanation
 “on his part impossible to him when you adopted the line of in-
 “subordination to the authority of the Crown with which he is in-
 “vested. You did not remonstrate against the Governor’s refusal
 “of permission to make use of his conversation with you, but you
 “broadly asserted your right to do so in disregard of his opinion,
 “and you then took the erroneous ground that His Excellency
 “had exceeded the scope of his authority.”

How nugatory this seems! I was to withdraw the second
 letter which I wrote to the Governor, and he was to withdraw his
 prohibition, and in fact the whole correspondence on the point of
 my right to find out the names of the Governor’s informant, was
 to be as if it had never been! If these persons were “justly
 “entitled to his” protection” on the 21st of November, (I quote
 from the Governor’s communication, (No. 8,) of that date) what
 have they since done to forfeit it? If it was right on the 19th of
 November to command me not to attempt to discover who they
 were, can it be right on the 23rd and 25th of February to give
 me full permission to find out? There is no reason whatever
 stated for the Governor’s willingness to cancel his prohibition.
 But the ~~fact~~ ^{truth} is that early in January he knew from a friend of
 mine—with whom he opened communications on the subject, who
 mentioned the matter to my brother, and to whom my brother,
 therefore feeling no difficulty as to discussing the subject, disclosed
 the fact—that I was aware that Mr. Cuckow and Mr. Pollard were
 his informants. Then, what candour is there in his stating that he
 assumed, as he was bound to do, that I still desired to follow out

my original design of making use of the conversation? or why should it be so conciliatory on his part to give me leave to find out what he was conscious that I already knew? Again, what was there objectionable in my letter of the 17th of November? or what insubordination in my then avowing that I deemed myself at liberty to do what he in February admits that I might very well have done without any such avowal? He professes to consider that my letter of the 17th of November invited his sanction—that was not insubordination. Then, why should that letter, or any part of it, be withdrawn? When did the insubordination begin? Was it when he refused permission on the ground, which he has since virtually abandoned, of the privacy of the conversation? And did he, by putting forward a reason to the fallacy of which he knew I must object, intend to “invite” insubordination, which was immediately to be repressed by a command? But I did not adopt the course of remonstrating, and I thus rendered all explanation impossible! I leave any man to conceive, if he can, the happy position of a public officer in this Colony remonstrating with Mr. Hincks with a view to explanation of peremptory treatment. Still, I must point out that in my letter of the 20th of November, (No. 7,) I did endeavour to induce His Excellency to reconsider his decision. My efforts certainly had not the result of producing the explanation, which only came three months later.

I am afraid that I may weary my readers, and I shall pass as lightly as possible over the rest of the Correspondence.

I wrote to the Governor on the 25th of February (No. 45.)

I received a communication from him on the 26th (No. 46.)

I wrote to him on the 27th (No. 47), pointing out some errors in his last previous communication. By way of reply on one point—though how it was any answer to my comments on a positive misstatement, I could not understand—he recurred to my letter of the 24th, which he professed to consider offensive. And on the other point he added a few words which did not in any way meet what I had written.

On the same day I wrote, (No. 49,) explaining that the contradiction between his two communications of the 23rd (of which I have already shown that one was intended to be public and the other private) was the cause of my writing as I did on the 24th. I did not choose to notice certain expressions in his letter of the 27th, nor did I consider any apology necessary.

On the 28th I received the communication, No. 50, which required no reply.

The next letter in the Correspondence is from the Governor to me, and is dated the 9th of March, (No. 51). I received this on coming out of Court, at about two o'clock in the afternoon. The Mail was to close at six. I immediately wrote my letter of resignation. I took the precaution of enclosing a copy of the letter letter No. 51, because I really doubted, and I still doubt, that the Governor's letter gave a perfectly correct version of the Despatch.

The phraseology of the first part of the letter is somewhat singular; but in so far as it is intelligible, it purports to convey on the part of the Secretary of State, first, an insinuation that either directly myself, or indirectly through my brother, I had furnished Mr. Winter with information, and next, an assertion that my brother had used information communicated to him by me. As regards the assertion, the documentary evidence, without reference to any statement of mine or my brother's, completely refutes it.

And with respect to both the insinuation and the assertion, as they purported to have been made, notwithstanding the positive declarations of my brother and myself negating what they imputed, I had only this alternative, either to sacrifice all honor and self-respect, or to resign. Without any hesitation I adopted the latter course, taking at the same time the precaution of sending to the Secretary of State a copy of the Governor's letter. Any regret that I might have felt at leaving the public service—in which I certainly had some right to expect promotion—was mitigated by two considerations. One is, that the last part of the Governor's letter purporting to give the substance in this respect of the Duke of Newcastle's Despatch lays down in effect these doctrines—1st, That it is the "positive duty" of public officers in this Colony to play the part of private and virtually anonymous informers 2nd, That they are entitled to cloak their meanness under the mantle of the Governor's authority. And 3rd, That the Governor does right in affording them that protection. The other is, that although if I had continued Solicitor-General, or been appointed Attorney-General, I should have endeavoured to perform my duty under Mr. Hincks as Governor, my knowledge of him, and my acquaintance with the necessary closeness of the relation between the Governor and the Attorney-General in this colony, leave no doubt on my mind, that no man with a proper sense of honor and self-respect can for any length of time continue Attorney General under him.

On the subsequent letters, 7 A, and 52 to 56 inclusive, it is not necessary to make any observation.

After the letter No. 56 come in the two papers a and b, one

a letter from Mr. Walker when Lieutenant Governor in 1857, and the other an Extract Minute of the Court of Policy, both mentioned in my letter to the Secretary of State dated the 19th of December 1862 (2 A.) I have previously stated my reasons for publishing the letters marked e and f. It is difficult for me to believe that, notwithstanding the positive statements of my brother and myself, and in spite of the intrinsic evidence of the papers before him, the Duke of Newcastle could have made the insinuation conveyed in such a round about style, or have ventured on the assertion intimated, in the Governor's letter of the 9th March (No. 51.) But I cannot prove that the Governor has incorrectly rendered the Despatch; and though it is not necessary for me to give any corroboration of my statements in order that they may be believed by those to whom I shall distribute these papers, still as some copies of them will no doubt fall into the hands of persons unacquainted with me, I have thought it desirable to disprove by other evidence than my own the calumnies which the Governor puts forth as the contents of the Despatch.

And now for a very few concluding observations on points not suggested by comments on the Correspondence.

I am inclined to believe—of course, I cannot condescend to make any inquiries of either of the Governor's informants—that Mr. Cuckow was aware that my brother had drawn Mr. Winter's Memorials, and spoke to Mr. Pollard of the handwriting as "Mr. Gilbert's," meaning my brother's; and that Mr. Pollard chose to jump at the conclusion that he referred to me, and hurried off to the Governor at once with his tale. There can be no doubt of his fitness for the performance of that "positive duty" in the way of secret tale-bearing to the Governor which would appear to be incumbent on public officers in this Colony, and I may add, without wishing to do the class any injury, that most men in the public service here are so lax as regards this particular duty, that he is not likely to be ousted by competition from any pre-eminent favour which he may enjoy on this score.

My recurrence on this point of "positive duty" to the Governor's letter of the 9th of March, suggests to me to point out, with what a peculiar kind of consideration I have been treated. I am told that two persons have put forward a charge against me of conduct which would have been dishonorable in me as a public officer, and that because they believed it—which in itself was an insult to me, and a reason therefore why I should know who had insulted me—they are entitled to all respect and credit; the stigma attempted to be cast on my honor is a matter of no

consequence, and the idea of my feeling any resentment is not to be tolerated!

I can account for the Governor's animosity against me as shown throughout these proceedings, only by supposing that it arose from my having been Mr. Smith's adviser in the suit for libel brought by him against Mr. Short, and in the defence of an action brought by Mr. Short against Mr. Smith, referred to in my letter No. 16, and in which I found it necessary to expose the falsehood of Mr. Short; and that the warmth of the Governor's partisanship in favour of that person, as shown in the Correspondence A. to L., produced in his mind proportionate excitement against me. Whatever the cause, the papers which I publish show that the Governor deliberately got up with me one of those personal contentions, so many of which he has contrived to raise with various persons since his arrival in the colony; that he treated me in the most offensive and overbearing manner throughout; and that his object was to induce me to resign. I was determined that I would not resign in consequence of anything that Mr. Hincks might say or do; but that if the unfair and unworthy treatment which I received at his hands should be sanctioned and adopted by the Secretary of State, I would then through him send my resignation to the Queen. The time arrived when I was informed by the Governor—whose statement, though I might doubt it I could not disprove,—that the Secretary of State sanctioned all his injurious conduct towards me; and the resolution which I had formed was instantly carried into effect.

But, from the treatment which I have received at official hands, I turn with satisfaction and gratitude, to that which has been extended to me by the community. I have had the cordial support, in every way in which it could be given, of the most honorable and influential men. And immediately after my connection with the Government service was known to be at an end, the representation in the Combined Court of the constituency of Georgetown was offered to me, and I was elected without any show of opposition.

The confidence which has been so largely shown to me with but a slight knowledge of the circumstances in which I have been placed, has been my chief inducement to publish these papers to prove that the confidence was not misplaced. In distributing them among those whose opinions I chiefly value, I lay no restriction on the communication of them to others.

5th May, 1863.

J. T. G.

While the last sheet of these remarks was in the press, the subjoined letter was received :—

No. 577.

7th May, 1863.

Sir,—I am directed by the Governor to acquaint you that he has received from the Secretary of State a Despatch in which His Grace desires you to be informed that Her Majesty has been pleased to accept your resignation of the office of Solicitor-General of this colony: and further that my letter to you of which you enclosed a copy is a correct communication of the whole contents of His Grace's Despatch No. 574 of the 14th February.

I am, Sir,

Your most obedient Servant,

W. WALKER,

Government Secretary.

J. TROUNSELL GILBERT, Esq.,

&c. &c. &c.,

British Guiana.

As the Secretary of State verifies the correctness of the Governor's letter of the 9th of March, he takes upon himself the insinuation and the misstatement of fact in that letter.

J. T. G.

MEMORANDUM OF CONVERSATION BETWEEN GOVERNOR HINCKS, AND MR. J. TROUNSELL GILBERT, ON 5TH NOVEMBER, 1862.

November 6th, 1862.

Yesterday I received a message from the Governor, stating that he wished to see me on the subject of the claim of the sailors of the *Savinea B. Nora*. I accordingly went to see him at his office at the Public Buildings; and after that matter had been discussed, we had a conversation to the following effect:—He said that various things which had been communicated to him had led him to suppose that I was acting in hostility to the Government, and that just before his leaving town to go to Berbice (which was on the 24th of October) he had been told by a person, who said that he had it from another person who was aware of the fact, that the original manuscript of Mr. Winter's Memorial to the Secretary of State, about which so much has been said, was in my hand-writing, (and I understood him to say that the originator of this state-

ment had seen the original manuscript); that he had mentioned the matter to the Attorney General, who had appeared very much startled, but had expressed his disbelief of the story; that while in Berbice he had received a communication to the effect, that the person who had furnished his informant with the statement was mistaken, and that the hand-writing was not mine, but my brother's; that he had not since had an opportunity to mention this to the Attorney-General,* but that in frankness and candour, he had mentioned the matter to me, as he had mentioned it to the Attorney-General; he put it in this way, in fact, that his reason for mentioning it to me was, that he had mentioned it to the Attorney-General. He also stated in the course of his observations that he considered that a person in my position ought to support the Governor, or Government—I am not sure which word he used—or that if he had anything to say in opposition to the Governor he should come to him and state it. This is the substance of what the Governor said before coming to a pause. When he paused, I said by way of answer, that I understood him to state, that he was now quite satisfied as to the incorrectness of the information which had been given to him on the subject of my hand-writing, and that he should not have mentioned the matter, but that he had spoken of it to the Attorney General; he assented to this; and I then went on to say that he had referred to other matters as evincing hostility on my part, and I inquired what those other matters were; he said that he had not noticed those other matters, and that he should not have mentioned them but for the circumstance of his considering it only candid to open the subject for the purpose of telling me what he had heard about the handwriting, and his communication of it to the Attorney General; that one thing which had struck *him* was, that Mr. Winter in his memorial had spoken of the hostility of officials; that he considered this unfair, because, even if it was the fact, Mr. Winter could only have gathered this from private conversations which it was unfair to repeat; and that my intimacy with Mr. Winter and others opposed to him (the Governor) made him infer, and that these things would be talked about, and that it was inferred, that Mr. Winter knew of my hostility and meant to refer to me. At this point he paused, and I said that I could not admit that any body had any right to infer from the fact that I had for a long time been, and still was, intimate with Mr.

* Note.—The Governor returned from Berbice in the Steamer on the evening of the 30th, and the Attorney-General started the same evening on an expedition, from which he has not yet returned.

Winter and Mr. Perot, that I was therefore hostile, or had expressed any hostility to him; that if there was any general expression in the memorial as to general hostility to him on the part of officials, it seemed to me much more likely to mean that there was a general impression abroad as to the general hostility of the officials; and I asked him if I had ever shown any want of respect to him, or if he was aware of my having exhibited any hostility to him in any way; he answered in the negative; I repeated my denial that any inference could be drawn from the fact of my intimacy with Mr. Winter, or from any expressions that there might be in his Memorial; and I said that I presumed that the fact of the Memorial being in my brother's handwriting could not be taken in any way against me; to this he implicitly assented; I then asked him to tell me who the persons were through whom the information had come to him as to the handwriting; he declined; I then pointed out to him that the only positive statement as to a fact, which had been reported to him for the purpose of injuring me, had proved unfounded, and I said that I thought it was a great pity that there were persons who carried such stories to the Governor; he admitted that it was a pity, but said that such things would always be; he added, with respect to the parties through whom this particular information came, that he believed that the originator of the statement did not mean for it to be used against me, and that the person who told him (the Governor) was so circumstanced that, hearing it, he ought, ~~and~~ it was his duty, (I think he used the latter expression,) to communicate it; he mentioned that he had also heard that I had written S. A. Harvey & Co.'s letter to the Court of Policy: I made no comment on this,* but I reverted to my request for the names, saying that I considered that I had a right to them if only for this reason, that he had mentioned the matter to a third party; he then said that he had mentioned it only to one whom he knew to be my friend, but that he would consider whether he would give them, and intimated that possibly he might give the name of his immediate informant, but that he was more doubtful about the other; I said that I did not want one without the other; that I did not press the matter, as to a person in his

* Note.—I was determined not to be diverted from my main object by the discussion of a matter entirely unimportant, as far as my position as a public officer was concerned. I had written that letter. I of course took no pains to make known, but I never thought of concealing, the fact. I had vindicated my brother and two of my most intimate friends from imputations cast on them; but in doing so, I had written nothing in any way disrespectful to the Governor ~~and~~ evincing hostility to the Government.

position all I could say was, that I considered that I had the right to know ; he repeated that the remote informant had no intention of the statement being used against me ; I then said, " Then it is " the busybody who reported it to Your Excellency that is desirous " of damaging me ;" he again said something to the effect that it was the duty of the person who communicated with him to inform him of anything of that sort that came to the knowledge of that person ; I replied that of course I could not tell who that person might be, but that I had a right to know, that I admitted that the conduct imputed to me would have been very improper in me as a public officer ; and that I must add, without meaning any disrespect to His Excellency, that I considered that he ought not to receive any such information unless the person giving it was willing that his name should be disclosed ; he said that he did not see how he could help receiving information ; I told him, that in a similar position I should ignore anything that I heard, unless, and stop any information being given to me until, my informants consented that their names should be made known : he seemed somewhat moved by this, and again said that he would consider the matter, and I understood him to intimate that he would consult the Attorney General on his return to town ; I finally said that I did not intend to (or I probably should not) say or do anything to either of these persons, but should treat them with perfect contempt (I distinctly remember using the words " treat them with perfect contempt ;") but that I considered I was entitled to know who they were. He made no rejoinder to this, and scarcely another word—indeed I do not recollect that any other words at all except the ordinary form of leave-taking—passed between us. I have summed up as well as it was possible for me to do it, what passed between us, and I have given it as correctly as I can and in its proper sequence. I am sure that I have not omitted anything material on either side.

J. T. G.

No. 1.

*Georgetown, Saturday,
November 15th, 1862.*

HIS EXCELLENCY FRANCIS HINCKS, ESQUIRE, C.B.,
Governor of British Guiana.

SIR,—At the termination of our interview on Wednesday, the 5th, Your Excellency remained in doubt as to whether you would disclose to me the names of two persons through whom a statement—afterwards admitted by your immediate informant to be unfounded—had reached Your Excellency, to the effect that the original draft of a Memorial of Mr. Winter to His Grace the Duke of Newcastle was in my hand-writing. I have hitherto waited in expectation of a definitive answer, but not having received one, I now venture very respectfully to submit to Your Excellency the reasons on which I mainly rely in support of my right to a disclosure. I assume, of course, that the objection to a disclosure originates with the persons themselves, or, at least, with Your Excellency's immediate informant, as I can see no reason why the objection should be a spontaneous one on Your Excellency's part. To my mind, the maker of such a statement cannot dispute the right of the recipient, and the recipient incurs the obligation, to disclose to the person against whom the statement is made the name of every one responsible for it. In this case Your Excellency not only received the statement, but imparted it to the Attorney-General—which strengthens my position as regards Your Excellency's obligation in the matter. Again, persons who choose to place themselves in the position which these persons occupy, are scarcely entitled on the score of personal consideration, to be guarded from any unpleasantness which may possibly result from an exposure of their names or their motives. These reasons would be sufficiently cogent in a case between private individuals, to one of whom something had been told for the purpose of injuring the other, and which the person receiving the information would be entitled to notice. But with how much greater force do they apply to the respective official relations of Your Excellency and myself. For if, on the one hand, my position as an officer of the Crown would have made (as I fully admit that it would) such an act as was imputed to me altogether unjustifiable, so, on the other, it should entitle me to ask from Your Excellency, as the Representative of Her Majesty the Queen, the

names of the authors of a statement made to you, and intended to affect me injuriously in my official position. A contrary doctrine would expose public officers in this Colony to a system of accusation which, so far as the accused were concerned, would be virtually anonymous. It seems to me that a subsequent admission that a charge of this sort is without foundation only strengthens the claim of the person against whom it has been made to know the names of its authors, whose eagerness to injure him has made them hazard a charge which could not be verified. In my interview with Your Excellency, I stated that I did not, and I admit that I cannot, press this matter on Your Excellency as I should on any other person; but, after careful consideration, and on the presumption that I shall otherwise receive no further communication on the subject, I have thought it right, with all respect, to lay before Your Excellency reasons which appear to me conclusive, and some of which may perhaps not have occurred to Your Excellency.

I have the honor to be, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

No. 2.

Government Secretary's Office,

November 15th, 1862.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date, and to acquaint you, in reply, that in declining to furnish you with the names of the individuals from whom he received the information that Mr. Winter's Memorial to the Secretary of State was in your handwriting, His Excellency was guided entirely by his own judgment, and had had no communication on the subject with the individuals in question.

His Excellency has no doubt that these individuals acted in perfect good faith, and that believing you to be the author of the document referred to, they performed their duty to the Queen and to Her Representative in this Colony in apprizing him of what they doubtless believed to be a gross breach of duty on the part of a servant of the Crown.

Under all the circumstances of this case, the Governor feels it his duty to decline giving the information asked for in your letter.

I have the honor to be,

Sir,

Your most obt. servt.,

WM. BRANCH POLLARD,
Actg. Govt. Secy.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

No. 3.

Georgetown, November 17th, 1862.

To His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—After the positive terms of Your Excellency's reply to my letter of the 15th, I should not again address you on the subject to which it refers, but that I consider it only candid to state, that, as the matter has now been communicated to the Acting Government Secretary—in addition to the Attorney-General, to whom alone I understood Your Excellency at our interview to say that you had previously to that time mentioned it—and as the originators of the statement against me may have spread it much more widely than the contradiction, I deem myself at liberty to make known what has passed on the subject; especially for the purpose of procuring, if possible, the information which Your Excellency declines to give me.

And, as I am writing on this topic, I will add, that I venture very respectfully to dissent from Your Excellency's estimate of the conduct of the persons who made the statement. I admit that if either of the two gentlemen in this Colony who are connected with Your Excellency by marriage, receiving such intelligence, communicated it to you, he would be simply performing a duty incumbent on him, and acting in a perfectly proper and honorable manner. I have no reason whatever for supposing it at all probable that either of these gentlemen did communicate the statement to Your Excellency, but the possibility of it makes me adopt the caution of excepting them. And, excepting them, I must say, that, in my opinion, such conduct in any man, official or non-official, was not meritorious, but mean.

In our interview, Your Excellency stated that you were actuated by a wish to be frank and candid with me. In using equal

frankness in the expression of my opinion as to third persons, I trust that Your Excellency will not impute to me, what I entirely disclaim, any the slightest intention of disrespect to Your Excellency.

I have the honor to be, very respectfully,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No 4.

*Government Secretary's Office,
November 17th, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date, and to acquaint you, in reply, that His Excellency is of opinion that you are not justified in making known what passed between him and you during a private conversation, without his express permission, which he is unable to grant you.

His Excellency regrets to notice that, while disclaiming the slightest intention of disrespect to him, you have nevertheless intimated a dissent from his opinion in terms scarcely courteous. The Governor desires me further to remark, that when you thought proper to address him officially on this subject, you might fairly have anticipated an official reply. While His Excellency regrets that there should be any difference of opinion with you on the subjects referred to in his letter, he has no doubt that the proper mode of appealing from his decision is by addressing the Secretary of State.

I have the honor to be,

Sir,

Your most obt. servt.,

WM. BRANCH POLLARD,
Actg. Governmt. Secretary.

To J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

No. 5.

Georgetown, November 18th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I must apologise for putting Your Excellency to the trouble of reading another letter from me; but if I were not to re-

ply to Your Excellency's last communication, the omission might be construed into assent to the terms of it.

I must very respectfully state, that, in my judgment, none of the characteristics of a private communication attach to what has passed between Your Excellency and myself on the subject in question; and this is the reason why I have not asked permission, and why I must still assert the right, to make the matter known, as I may consider necessary.

I have carefully looked over my last letter to your Excellency, and I cannot discover anything which warrants the suggestion, so disagreeable to a gentleman, of a want of courtesy. All the expressions relating to Your Excellency are, to the best of my judgment, perfectly respectful. I have made a careful distinction between my contempt for your informants and the respect with which I am bound to treat Your Excellency.

I have respectfully maintained my right to a disclosure of the names of the persons who conveyed a statement to Your Excellency intended to injure me in my official position; but the question as to the disclosure is not of sufficient importance to me to induce me to appeal to the Secretary of State from Your Excellency's decision refusing me the information.

I have the honor to be, Sir, very respectfully,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 6.

*Government Secretary's Office,
November 19, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of yesterday's date, and to make the following observations in reply thereto.

There is nothing in that letter to induce the Governor to modify the expression of his regret that you have intimated a dissent from his opinion in terms scarcely courteous. His Excellency obviously referred to your remarks as to the conduct of individuals who you were informed had, in the opinion of His Excellency, simply performed their duty to the Queen and to Her Representative in the Colony. The Governor trusts that he is correct in assuming that you did not intend to convey to His Excellency an intimation that it was your determination to act in

opposition to his views, but your remarks with reference to the conversation which His Excellency held with you on the 5th instant, leave him no option but to lay his commands on you formally not to make any use whatever of what passed during that conversation.

I have the honor to be,

Sir,

Your mo. obt. servt.,

WM. BRANCH POLLARD,

Actg. Govt. Secty.

To J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

No. 7.

Georgetown, November 20th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—In Your Excellency's communication to me of yesterday's date, Your Excellency has been pleased to lay your commands on me formally not to make any use whatever of what passed during our conversation of the 5th.

I wish to avoid writing a single unnecessary word on the subject; but in justice to myself I must state what is the real question between us.

Your Excellency opened the matter by saying that you were actuated by a wish to be perfectly frank and candid with me, and as regards the topic to which alone our present correspondence refers, you proceeded to say, that you had been told by a person who had heard it from another person, that the draft of a Memorial of Mr. Winter to the Secretary of State was in my handwriting; that you had mentioned this to the Attorney-General; that your immediate informant had afterwards admitted that the handwriting was not mine; and that as you had spoken of it in the first instance to the Attorney-General, you considered it right to let me know it. I have not entered, and I will not now enter, into other topics introduced by Your Excellency into the conversation. Nor will I go into long details on this particular one. I requested from Your Excellency the names of the two persons through whom the statement had come to you. You at first declined to give them, but afterwards said you would take time to consider. I clearly remember saying to Your Excellency, that

though I asserted my right to know the names, I should probably take no notice of the persons, but should treat them with perfect contempt. These were my very words; and I certainly did not then gather from speech or manner of Your Excellency that you considered the expression uncourteous to you by reflection from the persons to whom it was meant to apply. I mention this only because Your Excellency has since taken exception to similar expressions in my letters. I waited ten days, and having received no communication, I applied by letter for the information that I required, and it was refused. I stated that I considered myself at liberty to make known what had passed on the subject. Your Excellency expressed the opinion that I would not be justified in doing this without your permission, which you declined to grant. I asserted my right to do it. Your Excellency has thereupon been pleased to lay on me your commands as above stated. I respectfully regret that I cannot comply with such commands. Any order within the scope of Your Excellency's authority and of my duty I should cheerfully obey, but this goes beyond both. I do not wish to be misunderstood as to the intention that I have expressed. It is—to make known, as I may consider necessary, that Your Excellency told me that the statement against me to which I have referred, had been made, and had been admitted to be unfounded; but that you had refused to give me the names of the persons through whom it reached you;—and to procure, if possible, the information from some other source. I by no means see my way clear to the carrying out of the latter part of the intention, but in any case I cannot do it without reference to the former. Your Excellency's prohibition would preclude me from making any allusion to the subject. My present position is this:—Your Excellency tells me that a charge has been made to you against me of conduct which would have cost me my official situation, and would have disgraced me as a gentleman, because it would have amounted to clandestinely doing what I could not openly avow, and that the charge has afterwards been admitted to be unfounded; I respectfully request to be furnished with the names of the persons who have attempted to stab me in the dark; they are refused; I state that I will make known these facts, and endeavour to procure the information otherwise; I am forbidden by Your Excellency to make any use whatever of what Your Excellency has told me, and this on the ground that the conversation between us was a private one. Even if the conversation on this point could otherwise have been considered private or in any way confidential, the fact that the confidence was partial would have

changed its character, and entitled me to say, that I would use the part which had been disclosed, to find out the rest which I had a right to know. But there was nothing in any way private or confidential about the communication on this subject—the facts had been communicated to the Attorney-General, and were in the power of two persons, unknown to me, who might then, and may still, disclose them as they please; and, moreover, in the nature of the communication, there was nothing private or confidential. If it had related to any private matter of Your Excellency, or of any third person, or to any public business, the case would have been entirely different; but it relates entirely to myself, and is at my disposal—especially for the purpose of enabling me to discover the names of persons who virtually slandered me in the first instance, and which Your Excellency, while informing me of their underhand dealing, thinks it right to conceal.

Your Excellency will, I am sure, excuse my having written at such length. I have done so in the hope that the reasons which I have offered will induce Your Excellency even now to acknowledge that I am right in the resolution which I have formed, and to which, with all respect to Your Excellency, I must adhere.

I have the honor to be, Sir, very respectfully,
Your most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 8.

*Government Secretary's Office,
21st November, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of yesterday's date, in which you inform His Excellency that you cannot comply with the commands laid upon you in my letter of the 19th inst. The Governor directs me to point out to you that the course which you have taken is both unusual and inconvenient. No subordinate officer of the Crown is justifiable in refusing to obey the commands of his official superior without accompanying that refusal with a tender of the resignation of his appointment. You maintain that the command which the Governor instructed me to lay upon you is not within the scope of His Excellency's authority. Even if you are correct in this opinion, you must be aware that you have an appeal on that ground from the decision of the Governor to Her Majesty's Principal Secretary of State for the Colonies. The Governor, acting

under a strict sense of his responsibility, issued a command, which, you may be correct in supposing was beyond the scope of his authority, but, reserving your right of appeal, it seems clear to His Excellency that your duty as an officer of the Crown was to obey it, and that such an act of insubordination as that which you have committed, must, if tolerated, be highly prejudicial to the interests of Her Majesty's service. The Governor is nevertheless most unwilling to adopt any proceeding which would render further official connection between His Excellency and yourself disagreeable, if not impossible. While he has deemed it proper to point out to you the two courses, one of which in his opinion you were bound to adopt, if you felt the point at issue of sufficient importance to induce you to resist the wishes of the Governor, he is nevertheless of opinion that, under all the circumstances of the case, he will best consult the interests of the public service by laying the whole matter before the Secretary of State. If you are satisfied to abide the decision of the Secretary of State on the point at issue between the Governor and yourself, His Excellency has only to observe, that he will be happy to transmit any representation of the case which you may desire to make on your own behalf. If, on the other hand, you should determine, without waiting for such decision, to act in opposition to His Excellency's commands, it will be his painful duty to accompany the representation which he will make on the subject with a recommendation that you be removed from office.

The Governor directs me further to observe, that, without desiring to enter into a discussion of non-essential points, and especially of what passed during a private conversation, he cannot admit the correctness of the inference which you have assumed in your letter, that there was any inconsistency between the remarks which I have made by his direction on certain epithets applied to the gentlemen through whom he received the information which has led to this correspondence, and the course which he took at the interview which he had with you on the 5th instant. His Excellency admits that you have stated with sufficient accuracy a remark made by you during that interview, but he does not believe that when you did so, he had been called on to express any opinion as to the conduct of his informants. He distinctly recollects that after you had spoken in the terms stated by yourself, he informed you in the very words, as well as he can remember them, employed in my letter of the 15th instant, that the gentlemen in question had acted in perfect good faith, and had performed a duty which they owed to the Queen and to Her Representative in ap-

prising the Governor of what they believed to be a gross breach of duty on the part of a servant of the Crown. The Governor does not recollect that after that expression of his opinion you repeated the remark which he considered wanting in courtesy. Being well aware of the Governor's opinion, respect for his office should, he thinks, have restrained you from unnecessarily obtruding on him offensive remarks on persons who are justly entitled to his protection.

The conduct attributed to you, you have yourself in your letter characterized as most improper, and yet you impute meanness to persons who made it known to the Governor, fully believing it to be true. It is granted that an unfortunate error was committed, and that an act done by your brother was attributed to yourself. It is not pretended that any injury was suffered by you. Nothing can be more improbable than that a person who promptly and spontaneously corrected an error into which he had inadvertently fallen would renew the charge; and beyond the Governor's most confidential advisers the matter has not transpired.

Your knowledge of it was derived from the Governor alone, who feels it his duty to maintain his right to require that communications made by him to the officers serving under him shall be deemed confidential.

I have the honor to be,

Sir,

Your mo. obt. servt.,

WM. BRANCH POLLARD,

Actg. Govt. Secty.

To J. THROUNSELL GILBERT, Esq.,

Solicitor General, &c. &c. &c.

No. 9.

Saturday, November 22nd, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,

Governor of British Guiana.

SIR,—To day is a busy day with me, and I have very respectfully to request that Your Excellency will be pleased to allow me until Monday to reply to your communication received last night. I will only say now, that I am prepared to accede to the terms on which Your Excellency proposes to lay the whole matter before the Secretary of State. But I have not time to-day to state in full my understanding of those terms, and to give a well con-

sidered, or even a hasty, reply to other parts of Your Excellency's communication. I respectfully conceive that this can make no difference, as it is too late for anything on the subject to go on to the Secretary of State by this Mail.

In the meantime, I have to state to Your Excellency, that I have been informed—and I am prepared, if required, to state how the information reached me—that Your Excellency has expressed an opinion that either the Attorney-General or myself must have furnished information on which some part or parts of one or both of Mr. Winter's Memorials—my intelligence is not more precise than this—is or are founded. I heard this some time ago, but did not consider there was any necessity to notice it. Within the last few days, however, I have thought it may be advisable to ascertain whether the information given to me was well founded. I have borrowed from Mr. Winter copies of his Memorials; and I have very respectfully to request that if Your Excellency has coupled my name in any such manner with those Memorials, or either of them, you will be pleased to specify to me to what portion or portions you intended to refer.

I have the honor to be, Sir, very respectfully,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 10.

*Government Secretary's Office,
November 24, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of the 22nd instant, intimating your acquiescence in the terms on which the Governor proposes to lay before the Secretary of State the subject now under discussion, and requesting that, if His Excellency has coupled your name in any manner with Mr. Winter's Memorials, he will be pleased to specify to what portions of them he intended to refer.

I have to state, in reply, that the Governor will be happy to transmit to the Secretary of State any representations that you may think it expedient to submit to His Grace, either in explanation of your refusal to obey His Excellency's commands, or of any portions of Mr. Winter's Memorials; but as the subject last referred to is one on which he has consulted with the Attorney-General and myself alone, and as it would be not only highly irregular but most prejudicial to Her Majesty's service for the Governor to

admit the propriety of such a request as that contained in your letter, His Excellency has directed me to acquaint you, that he must decline to comply with it.

I have the honor to be,

Sir,

Your mo. obt. servt.,

WM. BRANCH POLLARD,

Actg. Govt. Secretary.

To J. TROUNSELL GILBERT, Esq.,

Solicitor-General, &c. &c. &c.

No. 11.

Georgetown, November 24, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—Your Excellency's communication, this minute received, requires immediate notice. It contains the following passage: "I have to state, in reply, that the Governor will be happy to transmit to the Secretary of State any representations that you may think it expedient to submit to His Grace, either in explanation of your refusal to obey His Excellency's commands, or of any portions of Mr. Winter's Memorials." I do not understand this passage; and I have very respectfully to ask that Your Excellency will be pleased to state what is meant by the assumption that I have any explanation to offer, or that I am in a position to give any explanation, of any portions of Mr. Winter's Memorials. Because nothing that I have said or written warrants any approach to such an assumption; and because it insinuates against me a charge that I am in some way a co-operator with Mr. Winter in these Memorials.

Requesting an answer at Your Excellency's earliest convenience,

I have the honor to be, Sir,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

No. 12.

Georgetown, November 24th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—After careful consideration, I have come to the conclusion that it is better not to reply to your Excellency's remarks

on the course that I have pursued, except by saying that I very respectfully differ in opinion from Your Excellency.

I understand Your Excellency to propose that you shall lay the whole matter before the Secretary of State, to whom I shall have an opportunity, at the same time, of making a representation ; and that, pending the reference to His Grace, matters shall remain as they are. I presume that the communications to His Grace will be forwarded by the Mail to leave here on the 8th of December, and that Your Excellency will in the meantime furnish me with a copy of your letter to him, and a memorandum of the documents which you will transmit, so that I may know to what points particularly to direct my observations, and what papers, if any, it may be desirable for me to send. On this understanding I will undertake, that, pending the reference, I will disclose nothing that has passed on the subject between Your Excellency and myself. The only person to whom I have hitherto confided the matter is my brother. He has not hitherto spoken to any third person on the subject, and I enter into the same undertaking for him as myself. I speak advisedly when I say I have confided the matter to nobody but my brother. I have spoken to the Attorney-General on the subject, but it has been only to discuss what he has opened to me as having heard it from Your Excellency. While willingly giving this undertaking, I would, however, propose to print all the papers which I may send on, it is so much easier to read, and to grasp the meaning of, print than writing. I will take the precaution of employing for the purpose only one man who may be recommended to me as trustworthy, and on whom I will impose the condition of secrecy. But if Your Excellency objects that this proposal goes beyond the terms to which I have acceded, I waive it at once.

At the present stage of this matter, I certainly have no wish to enter on a discussion of the new points of difference raised by Your Excellency in your communication of the 21st, but I do not see how I can avoid it. My recollection of what passed at our interview on the subject of the expression of my opinion of your informants, differs materially from that of Your Excellency, and is as follows:—I asked Your Excellency for the names of these persons; you declined to give them; I then said that the only positive statement of a fact which you had mentioned, and which was reported to you for the purpose of injuring me, had proved unfounded, and that I thought it was a pity that there were persons who carried such stories to the Governor; Your Excellency admitted that it was a pity, but said that such things would be.

You then added, that you believed that the originator of the statement did not mean for it to be told against me, and that the person who told you was so situated that hearing it he ought, or it was his duty, (I think you used the latter expression,) to communicate it to you. The conversation then diverged for a very short time to other topics; but in a minute or two I reverted to my request for the names, saying that I considered I had a right to them, if only for the reason that you had mentioned the matter to a third party (meaning the Attorney-General). You then said that you had only mentioned it to one whom you knew to be my friend, but that you would consider the question; and you intimated that possibly you might give the name of your immediate informant, but that you were more doubtful about the other. I attributed this difference to the distinction that you had originally made between them. I said that I did not wish to be informed of the name of one without being told that of the other; that I did not press the matter, as to a person in Your Excellency's position, I could only say, that I considered that I had a right to know. You repeated that the originator of the statement had no intention of its being used against me; I replied as nearly as possible in these words:—"Then, it is the busy-body that reported it to Your Excellency, "who is desirous of damaging me;" you then repeated what you had said, to the effect, that it was the duty of the person who communicated the statement to you, to inform you of anything of that sort which came to his knowledge; I then said that I could not tell who that person was, but that I had a right to know; that I admitted, of course, that the conduct imputed to me would have been very improper in me as a public officer, and that without meaning any disrespect to Your Excellency, I considered that you ought not to receive any such information unless your informant was willing that his name should be given up; you answered that you did not see how you could avoid *receiving* information; I ventured to reply, that in a similar position, I should ignore anything that I heard, unless, and should stop any information being given to me until, my informants consented that their names should be made known. It appeared to me—though I may have been mistaken in this—that Your Excellency was somewhat moved by this mode of putting the matter, and you again said that you would consider what you would do, and I understood you to intimate that you would consult the Attorney-General on his return to town. It was then that I told Your Excellency that it was not my intention to treat these persons otherwise than with perfect contempt. Your Excellency recollects the words, and I remember

quite clearly that they were uttered just the moment before my leaving you. I do not believe that any words except those of formal leave-taking passed between us afterwards; and I say, without the slightest doubt, as far as my own recollection is concerned, that Your Excellency did not at our interview, either before or after this last observation of mine, use the words "that the gentlemen in question had acted in perfect good faith, and had performed a duty which they owed to the Queen and to Her Representative, in apprizing the Governor of what they believed to be a gross breach of duty on the part of a servant of the Crown," or any words to the same effect, or that went at all further than the expressions which I have given above as used by Your Excellency. If I am wrong my memory is more treacherous on this occasion than I have ever found it on any other.

Your Excellency must not suppose that I have the slightest intention of disrespectfully contradicting you. I merely very respectfully submit that Your Excellency's memory is at fault. Where our respective recollections differ, I can only rely on my own, and I am confirmed as to its correctness by a memorandum of the conversation which I made the morning after its occurrence, and on which I have since made notes, of any the slightest doubts that have subsequently occurred to me as to the substance of what was said.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 13.

*Government Secretary's Office,
November 25th, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt of your two letters dated yesterday, and I am to acquaint you in reply to that first received, that the Governor is of opinion that my letter of the 24th instant does not require elucidation, and he must therefore decline further correspondence on the subject.

In the letter subsequently received, you have entered at considerable length into the discussion of a point which the Governor considers of little importance. The real question at issue is, whether adverting to the relative positions of the Governor and yourself you treated His Excellency with the courtesy which he might fairly have expected from you, in applying certain offensive epi-

thets to persons whose conduct you had been made aware was approved of by His Excellency. Your reply was, that you had already, in the course of a private conversation, expressed similar sentiments, and that the Governor did not make any complaint, although His Excellency's impression as to the course of his conversation with you on the 5th instant would lead him to doubt the accuracy of your statement, yet as he did not adopt the precaution of aiding his memory by a written memorandum at the time, and as in his opinion the point you desire to establish does not tend to weaken the force of my former remarks, His Excellency is willing to assume that in private conversation, as subsequently in correspondence, you applied offensive expressions with regard to conduct which you were aware was considered meritorious by him.

With reference to other points raised in the letter under consideration, the Governor desires me to observe, that he declines entering into any stipulations that would fetter the perfect freedom of his action. To prevent misunderstanding, I am to acquaint you with what the Governor conceives to be the state of the case. It is the opinion of His Excellency that you have assumed a position towards him which you should not have done without tendering your resignation of office, and that official relations between him and you have been rendered undesirable by your own proceedings. You, on the other hand, are of opinion that you were justified in disobeying a command which you hold to have been beyond the scope of the Governor's authority. His Excellency expressed a readiness under the circumstances to refer to the Secretary of State the question at issue, but, at the same time, he wished you to understand, that if you rendered such an appeal nugatory, by taking action in the matter without waiting for the decision of the Secretary of State, he should consider your removal from office necessary on that ground alone, and without reference to the propriety or impropriety of the command laid on you by His Excellency.

The Governor directs me further to observe, that your demand for a copy of his Despatch to the Secretary of State is wholly inadmissible. That Despatch will be a report on your representation, and it will depend on the time when the representation is sent to him for transmission whether he will be able to forward it by the next Mail. It is His Excellency's intention to transmit to the Secretary of State a complete copy of the correspondence which has taken place on the subject.

I have already explained that the Governor cannot enter into any stipulation or understanding with you as a condition on which

you were to observe secrecy. You must yourself be aware, that it cannot be for the interest of Her Majesty's service that it should become known that so serious a difference should exist between the Governor and one of the law advisers of the Crown. The Governor has taken every possible precaution to guard against disclosure, and he relies on your adopting similar measures. It is the opinion of His Excellency that it would be highly objectionable to print your letter or Memorial to the Secretary of State. It is, of course, impossible for His Excellency to form any opinion as to the length of the representations which you propose to make, but as the Governor's Despatch will not be printed, and as His Excellency will transmit certified copies of the correspondence which has taken place, the printed matter would probably form a small portion of the papers.

The Governor directs me to observe, in conclusion, that he is of opinion that this correspondence should be brought to a close. If you desire to make any further objections to the decisions arrived at by His Excellency, it will, under all the circumstances, be more convenient that you should do so to the Secretary of State.

I have the honor to be,

Sir,

Your most obt. servt.,

WM. BRANCH POLLARD,

Actg. Governmt. Secretary.

To J. TROUNSELL GILBERT, Esq.,

Solicitor-General, &c. &c. &c.

No. 14.

Georgetown, November 26th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,

Governor of British Guiana.

SIR,—I respectfully assure Your Excellency that I have no more wish than yourself unnecessarily to prolong our present correspondence; but respect for myself, and a desire to place the questions between us in as clear a light as possible, require me to reply to your communication received last night. I will do so as soon as possible; but it is scarcely practicable to-day, and to-morrow I shall be engaged in Court.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

No. 15.

Georgetown, November 29th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—Both myself, and my brother, who is the only person that I trust with the copying of this correspondence, have been so much engaged, and subject to so many interruptions, that I cannot get my reply to Your Excellency's last communication completed in time to send it in to-day. Your Excellency shall receive it early on Monday.

I have the honor to be, Sir, very respectfully,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 16.

Georgetown, November 29th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—In replying to Your Excellency's communication of the 25th of Novr., I must first advert to the special subject of my letter of the 22nd, of your answer of the 24th, which, while it declines to give me any satisfaction whatever, broadly insinuates, without any reason given, and without any apparent grounds, co-operation on my part with Mr. Winter in his Memorials, of my reply of the 24th asking for some explanation of this, and to the reference to the same subject in your communication of the 25th, in which you positively refuse me all explanation, and point your refusal in such a way as to make it a reiteration of the insinuation.

On the absence of all consideration for me, which characterizes Your Excellency's part of this portion of our correspondence, I make no comment.

I certainly have no explanation to offer of any portion of Mr. Winter's Memorials; but as an assumption has been already made against me without any foundation, I must guard against any attempt which might be made to support this assumption on the ground of silence on my part.

On the 23rd and 24th of September the whole town was talking of the publication of certain papers in the *Colonist* of the 22nd. In the *Creole* of the 24th appeared a letter signed "Fred. Winter," stating, among other things, Mr. Winter's intention to make that publication, in so far as related to some papers in which he was interested, the subject of a Memorial to the Secretary of State.

For a month or more, the matter formed a common topic of conversation. A few days after the 24th, my brother informed me that he had been professionally retained by Mr. Winter to draft a Memorial on the subject. We live together, and he mentioned it to me as he would any other ordinary fact. I cautioned him to remember that it was a matter about which I must know nothing; and neither he nor Mr. Winter received any more assistance, or got any more information, towards the framing of this Memorial, or of the subsequent one, from me than from Your Excellency. I from time to time heard, as everybody else official or non-official heard, constant general allusions, in conversation, to the subjects of both Memorials; but I was so guarded against knowing anything of the particulars of their contents, that when my brother once verbally referred to a part of the first, I stopped him immediately; and I did the same thing when he once inadvertently commenced reading a passage from the second. As regards the second Memorial, until after the draft of it was made, I was not aware that my brother had undertaken to frame it. It was after his return from a visit to Berbee that he mentioned the fact to me, stating that he had drafted the Memorial in Berbee, and it was at home one evening when he was correcting the draft that he commenced reading from it, and I stopped him. Until Tuesday, the 18th of November, when Mr. Winter, at my request, lent me printed copies of the Memorials, I had not read a word of either, and I could not have told a word that was in them, except that I knew—what I had heard generally in common with most intelligent people in Georgetown—that Your Excellency, Mr. Short, and certain newspapers and other papers, were mentioned in them. I stopped my brother so quickly that what he said about the first, and what he read of the second, made no impression whatever on my mind.

Since procuring the copies, I have very carefully read them. I can find only two passages, one in each Memorial, with respect to which it is possible to conjecture that Your Excellency may, at first sight, hastily have stated your opinion that the information came from the Attorney-General or myself, though very little reflection should have led to a different conclusion.

The passage in the first Memorial, which is on the third printed page of it, is as follows:—"Your Grace will remember, that in November or December last, Mr. Short addressed to you a Memorial complaining of the conduct of the Attorney-General, Mr. John Lucie Smith, in connection with the introduction by him of an Ordinance constituting a Mayor and Town

“ Council, and that Mr. Smith reported upon this Memorial ; but
 “ Your Grace will learn with something more than surprise, that
 “ the substance of Your Grace’s answer to the Memorial was not
 “ communicated to Mr. Smith *until more than two months* after
 “ his Excellency had received it, and not even then, *until after*
 “ *he had communicated to Mr. Short himself.*” Now, Your
 Excellency knows that I was advising the Attorney-General in
 relation to a libel on him published by Mr. Short, that I was
 made aware of all that took place relating to this matter, and that
 the facts respecting this Despatch were as follows:—On some
 day between the 23rd and the 28th of April, the Attorney-General
 was announcing to Your Excellency his intention to take pro-
 ceedings against Mr. Short, unless he made proper amends. Your
 Excellency then incidentally told the Attorney-General, that some
 time before you had received a Despatch, the purport of which
 you mentioned, from the Secretary of State on the subject of Mr.
 Short’s Memorial, and that you had sent for Mr. Short and told
 him the purport of the Despatch, and intimated to him that he
 might as well let the matter drop. On the 28th of April the
 Attorney-General received through the Government Secretary a
 formal letter setting forth the result of the Memorial—intelligence
 of which, it was stated, had been received in the Colony some
 Mails before. I beg leave to say, that I am expressing no opinion
 on this passage when I suggest, that it is quite clear that if it had
 been founded on any information got from persons acquainted
 with these particulars, it might have been made much stronger
 for the purpose which it was intended to serve. But a day or
 two after the date of the Government Secretary’s letter, nearly
 four months before the occurrence out of which Mr. Winter’s first
 Memorial arose, when I had never confided what I knew to any
 person, that gentleman accidentally meeting me one morning, ob-
 served that it was currently reported that Your Excellency, shortly
 after your arrival here, had received the Duke of Newcastle’s
 reply to Mr. Short’s Memorial against the Attorney-General, and
 had communicated it to Mr. Short, but that you had kept back the
 intelligence from the Attorney-General until within a few days
 before. I did not wish to discuss the subject, and my only an-
 swer was, “ Is it reported ?” He jokingly replied, “ Oh ! you
 know all about it,” and I rejoined, “ Anything that I know about
 “ it, I do not know from report, and therefore I shall say nothing
 “ about it.” Afterwards, on the same day, I mentioned the mat-
 ter to my brother, but I have never disclosed the particulars to
 any other person ; moreover, it is quite clear, as I have said above,

that the statement in the Memorial is not founded on the particulars, and my brother informs me that what there appears is simply what was told to him by Mr. Winter, and he never communicated anything that he knew on the subject to Mr. Winter or to any other person. Besides, I presume that the mere terms of the Despatch would scarcely be considered a secret by anybody, and in July last, on the trial of the suit in which Mr. Short attempted to recover from the Attorney-General a sum of One Hundred and Seventy Dollars for the printing of the Town Council Ordinance, it became desirable to expose Mr. Short's falsehoods in his Memorial; and in showing the result of the Memorial, I put in the Government Secretary's letter, by which everybody present at the trial who noticed it might have become aware of the fact that intelligence of the result was in the Colony for some time before it was communicated to the Attorney-General.

The passage in the second Memorial to which I have referred, is on the second printed page of that Memorial, and in the following words:—"And I have understood, not from any *private* source, but by public rumour, that Your Grace has in your hands a communication from His Excellency upon the subject of the action for libel brought by the Attorney-General, Mr. John Lucie Smith, against Mr. Short, which gives the strongest possible proof of his wish to obtain this support, even at the sacrifice to Mr. Smith of his character, which would inevitably result from the adoption by Your Grace of His Excellency's suggestion for an order on Mr. Smith to discontinue the action." As regards this passage, without expressing any opinion of it, I may say, that it is quite evident that it does not rest on information derived from any one acquainted with the details of what had taken place, which are as follows:—On the 7th of July, the Attorney-General having announced to Your Excellency his intention to write to the Secretary of State on the subject of a condensed *resumé* of Mr. Short's libel which had appeared in some English papers, and of some reference to them in a letter received by the Administrator-General, you wrote to him stating, among some unimportant matters, that you would forward his letter to the Secretary of State, and adding, "I shall probably express my regret that you have felt it expedient to prosecute or to notice these attacks which, in my opinion, can do you no harm; and I can't but think that the Secretary of State will be of the same opinion. It would be uncandid in me not to mention this to you, but, of course, the matter is entirely personal, and you are the best judge of your own affairs."

On the 8th of July, your Excellency wrote to the Secretary of State to the effect, that, in your opinion, the Attorney-General had not suffered in the slightest degree from the attack of which he complained; that you regretted that he should have taken any proceedings against the press; that the Editor of the "*Colonist*" appeared to labour under the conviction that he had not been well treated by the Government; and that, of course, the action brought against him by the Attorney-General would tend to perpetuate the unfortunate bad feeling which existed; that as the Attorney-General avowed that he had taken legal proceedings not on personal grounds, but because the administration of justice was openly impugned, you thought it would have been only fair to have consulted you before commencing proceedings against the "*Colonist*," and that you thought there could be little doubt that an officer in the position of Attorney General could not bring an action for libel against a leading public journal without the Governor being more or less compromised by it.

The reply of His Grace, dated the 9th of August, and received by Your Excellency on the 6th of September, was merely to this effect, that His Grace concurred with you in opinion that if the Attorney-General took the proceedings on public and not on personal grounds, he would have done better to confer with you and be guided by your views.

On the 10th of September, Your Excellency, through your Private Secretary, forwarded to the Attorney-General copies of your Despatch and of His Grace's answer to it.

On the 11th of September, the Attorney-General wrote to the Private Secretary, stating in substance, that although the attacks made on him, and which openly impugned the administration of Justice, had exclusive reference to his conduct as public prosecutor, he sought no advantage from his position, and refrained from any official prosecution, being desirous that there should be no ground for imputing to him the least unwillingness to meet the accusation on perfectly equal terms; that he brought the action in a private shape, and that he submitted that under these circumstances he was under no obligation to consult Your Excellency, but that he begged leave to remind you that about the 24th of April last, before any steps were commenced, he did intimate to you that he intended taking proceedings and had placed the matter in the hands of Mr. Campbell and myself; that on that occasion he did not understand Your Excellency to express dissent nor yet assent, but to remain neutral; and that when he informed you in July last of his intention to address the Secretary

of State, Your Excellency in your answer gave him no reason to suppose that you took exception to his not consulting you in the first instance. That with reference to the concluding paragraph of Your Excellency's Despatch, he was much pained to find that Your Excellency should consider yourself in the slightest degree compromised by his having brought the action, and that with all submission he was unable to see that it had that effect; but that on the trial of the cause he should take care to have it clearly and explicitly understood, that he alone was responsible for the proceedings, and that Your Excellency was in no way concerned in them.

In Your Excellency's reply through your Private Secretary on the 12th of September, it is stated—that you deeply regretted that anything should have occurred to impair even in the slightest degree the cordiality which had up to that time marked the Attorney-General's intercourse with you; that you did not clearly gather from the Attorney-General's letter whether he was of opinion that in the conversation of about the 24th of April, the propriety of commencing a prosecution of the "*Colonist*" was brought before you for your opinion; that if so, you must admit that you had been under a misapprehension; that without pretending to any accurate recollection of a conversation to which you attached no particular importance at the time, your impression was that during the course of that conversation he told you that he had requested Mr. Campbell to call on Mr. Short for an explanation; that you had never entertained any feeling but one of regret that the action against the "*Colonist*" should have been commenced, and that that feeling would be much enhanced if it should appear to him that you had omitted taking any step to prevent it that it was your duty under the circumstances to take; that you assured him that your reticence on the subject was to be attributed solely to an unwillingness to risk being involved in a controversial discussion with an officer whose cordial support to the Government you felt to be essentially necessary; that in writing to the Secretary of State as you did, you were influenced by a desire to put a stop to proceedings which in your own judgment were prejudicial to the interests of the Government of the Colony, and that you had ventured to hope that if the opinion of the Secretary of State was in accordance with your own, the Attorney-General would have been convinced of the expediency of abandoning the proceedings against the Proprietor of the "*Colonist*;" that you had not failed to notice the distinction which the Attorney-General had drawn between different forms of action, but that on full con-

sideration you must adhere to the opinion which you had expressed to the Secretary of State, and in which His Grace had concurred, that the ground for action having been an attack on the character of the Attorney-General as a public prosecutor, no action should have been commenced except with your full concurrence; that you inferred from the remark in the concluding paragraph of his letter that he had not fully appreciated the meaning which you had intended to convey in your Despatch to the Secretary of State, that the subject was too important to be discussed in a correspondence of that nature, and that you would therefore confine yourself to a simple expression of opinion, that irrespective of the strong objections to prosecutions against the press for strictures on the conduct of public officers, there were special objections in the circumstances of this Colony to the prosecution by an officer of the Government of the only public journal which had supported the general policy and measures of Your Excellency.

The reply to be made to this letter required very serious consideration. The Attorney General and myself consulted on the subject. It is not necessary to enter into the particulars of what the reply would have contained. I will only say this, that it was considered desirable to direct Your Excellency's attention most particularly to your letter of the 7th of July, which I have quoted above. But the necessity for further correspondence was obviated by the result of an interview which the Attorney-General had with Your Excellency on the 13th, and at which Your Excellency, after having your attention drawn to this letter, ultimately told the Attorney-General that you did not wish him to do anything which he might consider to be inconsistent with his honor. The effect of what passed at that interview, was in reality to leave the Attorney-General to act entirely as he might think proper with respect to the proceedings against Mr. Short. The correspondence was then closed by a letter from the Attorney-General to the Private Secretary, referring to the understanding which had been come to at this interview as satisfactory, and a reply of Your Excellency through the Private Secretary accepting this conclusion of the matter as satisfactory. There can be no doubt, that if this passage had been founded on intelligence acquired from those who were well informed on the subject, it might have been largely amplified, and in a manner which the memorialist would probably have considered important to his purpose. I have set forth these facts in my own defence against an imputation which Your Excellency has cast upon me. I wish to be understood as carefully avoiding the expression of any opinion

on Mr. Winter's Memorials, or any portion of them; and whether the details which I have given would or would not have affected the case which Mr. Winter endeavoured to make out, is now a matter of no consequence; because if the correspondence which has passed between Your Excellency and myself should be transmitted to the Secretary of State, this letter cannot reach him until long after his decision on the Memorials, the Despatch relating to which should, in the ordinary course of business, leave the Colonial Office to-day.*

Thus, it is manifest, that the passage in the (second) Memorial is founded on rumour, arising from the leaking out of some of the facts; and on this point I have to add the following statement:—

Almost immediately after the close of the correspondence between Your Excellency and the Attorney-General, and certainly before the 22nd of September, I was told by Mr. Winter that a report was afloat to the effect, that Your Excellency had stated to the Secretary of State that you were compromised by the Attorney-General's proceedings against Mr. Short, and had endeavoured to induce His Grace to order the Attorney-General to stop the proceedings. I made no answer, not choosing to be drawn into any discussion on the matter; and I have since heard in various ways, that this report was, at that time, a subject of common conversation. With the exception of the Attorney-General, and of Mr. Campbell as his legal adviser, I have never spoken to anybody but my brother on the subject of what I knew. I did, as I have since informed the Attorney General, tell my brother what was going on as it happened, and before the occurrence out of which Mr. Winter's Memorials arose. I was placed in a position of some responsibility; I knew that if his opinion differed from mine as to the course to be pursued by the Attorney-General he would not only state it, but honestly urge it to me; I hold his judgment in respect, and have perfect confidence in his honour. Of what he heard from me he has never disclosed a word to Mr. Winter or to any other person. He tells me—as in reality it is perfectly manifest—that what appears in these two passages is simply an embodiment of Mr. Winter's instructions to him, and has no reference to anything that he knew himself. This is a mere statement of the fact, and implies no arrogation of any credit to him; for no honourable man could have acted otherwise.

* This Letter was commenced on 29th November, but was not concluded until the 1st December.

than he has. And now I conceive that I may respectfully submit that I have disposed of this subject.

With respect to the mode in which the questions between Your Excellency and myself are to be referred to the Secretary of State, I have very respectfully to observe, that I have always declined to initiate any appeal to His Grace; and that in Your Excellency's communication of the 21st, after a statement of certain objections to the course which I had pursued, there is the following passage:—"The Governor is nevertheless most unwilling to adopt any proceeding which would render further official connection between His Excellency and yourself disagreeable, if not impossible. While he has deemed it proper to point out to you the two courses, one of which in his opinion you were bound to adopt, if you felt the point at issue of sufficient importance to induce you to resist the wishes of the Governor, he is nevertheless of opinion, that under all the circumstances of the case, he will best consult the interests of the public service by laying the whole matter before the Secretary of State. If you are satisfied to abide the decision of the Secretary of State on the point at issue between the Governor and yourself, His Excellency has only to observe, that he will be happy to transmit any representation of the case which you may desire to make on your own behalf. If, on the other hand, you should determine without waiting for such decision to act in opposition to His Excellency's commands, it will be his painful duty to accompany the representation which he will make on the subject with a recommendation that you be removed from office." I very respectfully submit that the plain construction of this proposal is, that Your Excellency should take the initiative, that my representation should be consequent on yours, and that both should be forwarded at the same time. I certainly considered that Your Excellency meant, what seems to me only fair, that I should have a copy of Your Excellency's statement to the Secretary of State, so as to know what I should be called on to answer in my representation to him. I knew that Your Excellency would have the right, as you would have the power, to comment, by way of reply, on my representation which must be sent through you.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

Letter c.

Georgetown, Novr. 25th, 1862.

DEAR SMITH,—From enquiry made of you, I am aware that the Governor knows that I, as your adviser, was made acquainted with all that passed between His Excellency and yourself relative to your suit against Mr. Short, at least up to the close of a correspondence originating out of a Despatch received by the Governor from His Grace the Duke of Newcastle. Something has occurred between His Excellency and myself which may render it necessary for me to recall to His Excellency's mind what I did know, and to point out to him the position in which I was and am placed; and I should be obliged if you would let me have copies of all papers which were shown to me, as I should wish to avoid the slightest inaccuracy in referring to any of them. I am particularly anxious that you should not in the smallest degree compromise yourself by appearing to assist me in any way, and I therefore do not expect you to do this without obtaining leave from the Governor. But as I am aware of all the facts already, and as I only wish for the copies, in order that in setting myself right, if it should be necessary, in a communication to the Governor, I may not make the most trifling mistake, I presume that His Excellency will not object to my being furnished with the copies.

Faithfully your's,

J. TROUNSELL GILBERT.

J. LUCIE SMITH, Esq.

Letter d.

Georgetown, 26th Novr., 1862.

DEAR GILBERT,—I shewed your note to me of yesterday's date to the Governor, and His Excellency at once accorded to me his permission to furnish you with all the papers asked for. As I have no one in my office whom I would like to entrust with documents of this description to copy, I think the best plan will be to lend you the originals, which are herewith enclosed. I think you will find them complete, with the exception of the draft of my letter to the Duke of Newcastle of July last, which I have unfortunately mislaid.

Believe me, your's faithfully,

J. LUCIE SMITH.

J. T. GILBERT, Esq.,
&c. &c. &c.

LETTER A.—No. 587.

28th April, 1862.

SIR,—I am directed by the Governor to acquaint you, that some Mails ago His Excellency received an answer to the Despatch of the Lieutenant-Governor then administering the Government, forwarding to the Secretary of State a complaint from Mr. Short, then Contract Printer, against yourself and Mr. Imlach, then Mayor of Georgetown, in reference to the exclusive right claimed by Mr. Short to print and sell copies of the Ordinance No. 25 of 1860.

In his reply, the Secretary of State is pleased to direct, that Mr. Short be informed His Grace sees no ground for interfering in the matter to which the Memorial relates.

I am, Sir,

Your most obdt. servant,

W. WALKER,

Govt. Secretary.

Honble. J. LUCIE SMITH,
Attorney-General.

LETTER B.

Government House, 7th July, 1862.

MY DEAR ATTORNEY GENERAL,—I return the letter which you sent me, the object of which is transparent, viz., to spur on the Administrator General. The remarks about a Commission are simply absurd. Of course I will take (care) to forward your letter, which I hope to get in time. I shall probably express my regret that you have felt it expedient to prosecute or to notice these attacks which, in my opinion, can do you no harm; and I can't but think that the Secretary of State will be of the same opinion. It would be uncandid in me not to mention this to you, but, of course, the matter is entirely personal, and you are the best judge of your own affairs.

Faithfully your's,

F. HINCKS.

The Honble. Attorney-General.

LETTER C.

Government House, 10th Septr., 1862.

MY DEAR ATTORNEY GENERAL,—I think it only right that you should be in possession of my correspondence with the Secretary of State on the subject of your letter to His Grace.

Faithfully your's,

F. HINCKS.

The Hon. Attorney-General.

LETTER D. *Government House, 10th Sept., 1862.*

SIR,—The Governor has directed me to transmit for your information copies of the Despatch which he addressed to the Secretary of State enclosing your letter to His Grace on the subject of your proceedings against the *Colonist* newspaper, and of the reply thereto.

I remain, Sir,
Your's very obediently,

C. READY, P.S.

The Honble. the Attorney-General.

LETTER E. *Government House,
Demerara, 8th July, 1862.*

British Guiana.
No. 124.
Executive.

MY LORD DUKE,—The Attorney-General has requested me to transmit the enclosed letter to Your Grace. Having received it at a late hour on Mail-day, it is out of my power to enter at any length into the subject, but I may express my opinion, that the Attorney-General has not suffered in the slightest degree from the attacks of which he complains, and I must add, that I regret that he should have taken any proceedings against the press.

The Editor of the "*Colonist*" appears to labour under the conviction that he has not been well treated by the Government, and, of course, the action to which the Attorney-General alludes will tend to perpetuate the unfortunate bad feeling which exists. I must also remark, that as the Attorney-General avows that he has taken legal proceedings not on personal grounds, but "because the administration of justice was openly impugned," I think that it would have been only fair to have consulted me before commencing proceedings against the "*Colonist*." There can, I think, be little doubt that an officer in the position of Attorney-General cannot bring an action for libel against a leading public journal without the Governor being more or less compromised by it.

I have, &c.,

F. HINCKS.

His Grace the Duke of Newcastle, K.G.

LETTER F.

Downing-Street, 9th August, 1862.

B. Guiana.—No 470.

SIR,—I have to acknowledge the receipt of your Despatch No. 124 of the 8th of July, forwarding a letter from the Attorney-General of British Guiana, having reference to the circumstances under which he had taken proceedings against the Editor of the "*Colonist*," a newspaper published in the Colony. I concur with you in opinion that if the Attorney-General took the proceedings on public, and not on personal grounds, he would have done better to confer with you and be guided by your views.

I have, &c.,

NEWCASTLE.

Governor HINCKS, C.B.

LETTER G.

Georgetown, 10th Sept., 1862.

MY DEAR SIR,—I am much obliged to Your Excellency for your note of this day's date, and for favoring me with copies of your Despatch to His Grace, and of his reply thereto. I shall send an official reply to Col. Ready's letter to-morrow, having been too much engaged to-day to be able to do so.

I remain, my dear sir,

Your Excellency's faithful servant,

J. LUCIE SMITH.

To His Excellency the Governor.

LETTER H.

Georgetown, 11th Sept., 1862.

SIR,—I have the honor to acknowledge the receipt of your letter of yesterday's date, transmitting, by direction of the Governor, copies of the Despatch which His Excellency had addressed to the Secretary of State when forwarding my letter to His Grace, and of the reply thereto.

I am much obliged to the Governor for sending me these documents, and beg that you will be good enough to convey my thanks to His Excellency. As some misapprehension appears to exist with respect to the proceedings which I thought it my duty to adopt against the Editor of the "*Colonist*," I very respectfully take this opportunity of stating, that although the attacks made upon me which openly impugned the administration of Justice had exclusive reference to my conduct as public prosecutor, I

sought no advantage from my position, and refrained from any official prosecution, being desirous that there should be no ground for imputing the least unwillingness on my part to meet the accusation on perfectly equal terms. I brought the action in a private shape, and I submit that under these circumstances I was under no obligation to consult the Governor; but I beg leave to remind His Excellency that about the 24th of April last, before any steps were commenced, I did intimate to him that I intended taking proceedings and had placed the matter in the hands of my legal advisers, the Solicitor-General and Mr. Campbell. Upon that occasion I did not understand His Excellency to express dissent nor yet assent, but to remain neutral; and when I informed him in July last of my intention to address the Secretary of State, His Excellency in his reply gave me no reason to suppose that he took exception to my not consulting him in the first instance. I exceedingly regret that any misconception should have arisen on this point, and I beg leave to assure His Excellency that it is my earnest desire to do my duty to him on all occasions fully, faithfully, and to the best of my ability.

With reference to the concluding paragraph of the Governor's Despatch, I am much pained to find that His Excellency should consider himself in the slightest degree compromised by my bringing the action, and with all submission, I am unable to see that it has that effect; but I shall take care to have it clearly and explicitly understood at the trial of the cause, that I alone am responsible for the proceedings, and that the Governor is in no way concerned in them.

I have the honor to be, Sir,
Your most obedt. servt.,

J. LUCIE SMITH.

To Lieut. Col. READY,
Private Secretary, Government House.

LETTER I.

*Government House,
Demerara, 11th September, 1862.*

SIR,—I have the honor to acknowledge the receipt of your letter of yesterday's date, which I have laid before the Governor, who has directed me to assure you that he deeply regrets that any circumstance should have arisen to impair even in the slightest degree that cordiality which has hitherto marked your intercourse

with His Excellency. The Governor does not clearly gather from your letter whether you are of opinion that in the conversation which took place about the 24th April last between His Excellency and yourself, the propriety of commencing a prosecution of the "*Colonist*" newspaper was brought before him for his opinion. If so, he must at once admit that he has been under a misapprehension. Without pretending to any accurate recollection of a conversation to which he attached no particular importance at the time, his impression is that during the course of that conversation you informed him that you had requested Mr. Campbell to call on Mr. Short for an explanation on the subject of an article of which you complained. The Governor has never entertained any feeling but one of regret, that the action against the "*Colonist*" was commenced, and that feeling would be much enhanced if it should appear to you that he had omitted taking any step to prevent it that it was his duty under the circumstances to take. He desires me to assure you that his reticence on the subject is to be attributed solely to an unwillingness to risk being involved in a controversial discussion with an officer whose cordial support to the Government he feels to be essentially necessary. In writing to the Secretary of State as he did, he was influenced by a desire to put a stop to proceedings which in his judgment are prejudicial to the interests of the Government of the Colony, and he had ventured to hope that if the opinion of the Secretary of State were in accordance with his own, you would have been convinced of the expediency of abandoning the proceedings which you have taken against the Proprietor of the "*Colonist*." The Governor has not failed to notice the distinction which you have drawn between different forms of action, but on full consideration he must adhere to the opinion which he expressed to the Secretary of State, and in which His Grace has concurred, that the ground for action having been an attack on your conduct as a public prosecutor, no action should have been commenced except with the full concurrence of the Governor. The Governor infers from the remarks in the concluding paragraph of your letter, that you have not fully appreciated the meaning which he intended to convey in his Despatch to the Secretary of State. The subject is too important to be discussed in a correspondence of this nature, and the Governor will therefore confine himself at present to a simple expression of opinion, that irrespective of the strong objections which exist to prosecutions against the press for strictures on the conduct of public officers, there are special objections in the circumstances of this Colony to the prosecution by an officer of the

Government of the only public journal which has supported the general policy and measures of the Governor.

I have the honor to be, Sir,

Your most obedient servant,

C. READY, P. Sec., Lt.-Col.

The Honble. the Attorney-General.

LETTER K.

Georgetown, 15th September, 1862.

Monday morning.

SIR,—I beg to acknowledge the receipt of your letter of the 12th instant, and as it may be desirable that this correspondence, being of an official character, should close in a formal shape, I have the honor to state, that in the interview with which His Excellency favored me on Saturday afternoon, a perfectly satisfactory understanding was come to which renders it unnecessary for me to trouble you with any further reply.

I have the honor to be, Sir,

Your most obedient servant,

J. LUCIE SMITH,

Attorney General.

To Lieut.-Col. READY,

Private Secretary, Government House.

LETTER L.

Government House, Sept. 15th, 1862.

SIR,—I have the honor to acknowledge the receipt of your letter of this day's date, and I am directed by the Governor to assure you that it is entirely satisfactory to him.

I have the honor to be, Sir,

Your most obedient servant,

C. READY, Lt.-Col. & P. S.

To the Honble. the Attorney-General.

No. 17.

Government Secretary's Office,

December 2nd, 1862

SIR,—I am directed by the Governor to acknowledge the receipt during yesterday of your letter of the 29th ultimo, and to

acquaint you that His Excellency declines to re-open the correspondence which, as I informed you in my letter of the 25th ulto., he was of opinion should be brought to a close. The Governor cannot but regret the introduction of matter into this correspondence which is not only irrelevant to the point at issue, but which cannot properly be made the subject of discussion between His Excellency and yourself.

In order to prevent misunderstanding, the Governor has directed me to acquaint you, that it is his intention, in bringing before the Secretary of State your refusal to obey the command which he felt it his duty to lay upon you, to transmit to His Grace copies of your letters of the 15th, 17th, 18th, 20th, and 24th (No. 2) of November, and of my letters of the 15th, 17th, 19th, and 21st of same month. With regard to the other letters which form a portion of the correspondence, viz., yours of the 22nd and 24th (No. 1) of November, and mine of the 24th and 25th of the same month, the Governor considers their transmission unnecessary, but will not object to include copies of them with the others, if you desire that he should do so. Although it is not the intention of the Governor to raise any collateral issues, he will of course be ready to transmit to the Secretary of State any representations which you on your responsibility may think yourself warranted by circumstances in submitting for the consideration of His Grace.

I have the honor to be,

Sir,

Your mo. obt. servt.,

WM. BRANCH POLLARD,

Actg. Govt. Secty.

To J. TROUNSELL GILBERT, Esq ,

Solicitor General, &c. &c. &c.

No. 18.

December 6th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B ,

Governor of British Guiana.

SIR,—I respectfully assure Your Excellency, that I do not mean, in writing to you, to re-open the correspondence which Your Excellency has declared to be closed, but I have very respectfully to request that Your Excellency will be pleased to inform me, whether, by the Mail to leave here on Monday next, you propose to carry out the intention announced in your commu-

nication of the 21st of November, of laying the "whole matter
" before the Secretary of State."

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

No. 19.

*Government Secretary's Office,
December 6th, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt this afternoon of your letter of this day's date, in which you inquire whether His Excellency proposes to carry out the intention announced in his communication of the 21st ultimo of "laying the whole matter before the Secretary of State," and to acquaint you in reply, that I informed you in a letter dated the 2nd inst. and sent to you on that day, but the receipt of which has not been acknowledged, that His Excellency would transmit to the Secretary of State certain letters, the dates of which I specified. His Excellency offered to transmit the remaining letters forming the entire correspondence up to the time when he arrived at the opinion that it ought to be closed, if you desired that he should do so, but after affording you ample time to communicate your wishes, His Excellency has closed his Despatch, and has only transmitted that portion of the correspondence which relates to the point on which alone His Excellency is at issue with you.

I have the honor to be,

Sir,

Your most obt. servt.,

WM. BRANCH POLLARD.

No. 20.

Georgetown, December 8th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,

Governor of British Guiana.

SIR,—In reply to Your Excellency's last communication dated the 6th and received this morning, I have very respectfully to state, that I did not reply to Your Excellency's communication

of the 2nd for these reasons—that I had not been able to ascertain from Your Excellency whether or not you intended to take the initiative with His Grace the Secretary of State; that Your Excellency declared our correspondence to be closed; and that I thought it would be best to wait until just previously to the departure of the Mail, and then ascertain from Your Excellency the course which you intended to pursue. Having now learned from Your Excellency that you have closed your Despatch, and have transmitted to the Secretary of State a portion of the correspondence, I have very respectfully to request that Your Excellency will be pleased to give me a copy of your Despatch, my representation in answer to which shall be forwarded in ample time to give Your Excellency an opportunity of commenting on it, and of transmitting it by the next mail. I consider it important to transmit with my representation copies of the entire correspondence between Your Excellency and myself from the 15th of November to the present date. In the meantime, that I may not seem to be wanting in deference for His Grace the Secretary of State or for Your Excellency, I very respectfully request that Your Excellency will be pleased to forward to His Grace by this Mail the enclosed letter.

I have the honor to be, Sir, very respectfully,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

1.—A.

*Georgetown, Demerary,
December 8th, 1862.*

To His Grace the DUKE OF NEWCASTLE, K.G.,

Her Majesty's Principal Secretary of State for the Colonies.

MY LORD DUKE,—I have been informed by His Excellency the Governor, that he has closed a Despatch to Your Grace, and has transmitted a portion of a correspondence between His Excellency and myself on the subject of some differences which, I regret to say, have arisen between us. Circumstances, which I shall hereafter explain, prevent me from forwarding my representation on the subject to Your Grace by the present Mail; but I have requested His Excellency to give me a copy of his Despatch, and I will forward, through His Excellency, by the next Mail, such a representation and such documents as I may consider it

necessary to submit to Your Grace. Humbly trusting that in the meantime Your Grace will be pleased to suspend your judgment in the matter,

I have the honor to be,

My Lord Duke, with very great respect,

Your Grace's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General of British Guiana.

No. 21.

*Government Secretary's Office,
December 8th, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date, enclosing an original letter to His Grace the Secretary of State, but without the duplicate required by the rules of the service. In the expectation that a duplicate will be delivered to His Excellency in sufficient time, he will prepare to transmit the original.

His Excellency learns with surprise from your letter, that you did not reply to the Acting Government Secretary's letter of the 2nd instant, because you had not been able to ascertain whether His Excellency intended to take the initiative with His Grace the Secretary of State. You were distinctly informed in that letter, that His Excellency would transmit copies of certain letters (which were specified) to the Secretary of State, and that he would add others if you desired that he should do so; he cannot, therefore, admit that there was any ground for uncertainty on your part.

His Excellency has directed me further to express his surprise, that you should again apply to him for a copy of his Despatch to the Secretary of State, after having been informed by the Acting Government Secretary that such a demand was "wholly inadmissible."

I have the honor to be, Sir,

Your mo. obt. servt.,

W. WALKER,

Govt. Secretary.

To J. TROUNSELL GILBERT, Esq.,

Solicitor-General, &c. &c. &c.

No. 22.

Georgetown, 8th December, 1862.

SIR,—Being somewhat hurried to day, the necessity of sending a duplicate of my letter to His Grace the Duke of Newcastle escaped my attention. I have the honor now to enclose one. With all respect for His Excellency, I think it better not to enter into any discussion at present on the subject of the rest of the communication just received.

I have the honor to be, Sir,

Your most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

Honorable WILLIAM WALKER,
Government Secretary.

No. 23.

Georgetown, December 18th, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I herewith enclose a representation on my part to His Grace the Duke of Newcastle, which I very respectfully request that Your Excellency will be pleased to forward by the next Mail. The duplicate Your Excellency shall receive as soon as I can get the copy made—certainly before the departure of the Mail; and I will send to-morrow, if possible, the copies mentioned in my letter to His Grace. I further very respectfully request, that Your Excellency will be pleased to inform me whether it will be necessary for me to send duplicate copies of papers of which Your Excellency has already in your possession either the originals or copies.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

2.—A.

*Georgetown, British Guiana,
December 19, 1862.*

To His Grace the DUKE OF NEWCASTLE, K.G.,

Her Majesty's Principal Secretary of State for the Colonies.

MY LORD DUKE,—I am informed by His Excellency the Governor, that he has sent to Your Grace by the last Mail a Despatch relating to certain differences between His Excellency

and myself, and a portion of a correspondence which has been going on between us. Copies of the same portion of our correspondence are also sent herewith,—as I have thought best that my series of it should be complete,—and are numbered 1, 3, 5, 7, 12, 2, 4, 6, 8, and the copies of the entire remainder up to the 8th of December, which I also send, are numbered 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22. In addition to the copies of this particular correspondence, there are tacked together, in separate forms, copies of a correspondence lettered A, B, C, D, E, F, G, H, I, K, and L, between His Excellency and the Attorney-General, to which I have found it necessary to refer in my letter of the 29th of November (No. 16) to His Excellency, and copies of two documents (letters a and b) relating to my official services. In discussing my present position with His Excellency, I shall limit myself to the subjects of the correspondence which has taken place between His Excellency and myself. If His Excellency has brought before Your Grace any complaint against me on any other ground than those on which he relies in our correspondence, I trust with perfect confidence to Your Grace's fairness to give me an opportunity of answering such complaint. I shall advert further on to my request for a copy of His Excellency's despatch, and to his refusal. The differences between us originally arose out of a certain portion of our conversation at an interview on the 5th of November. No allusion has been made in our correspondence to any other portion of this conversation. In referring to the conversation, I shall confine myself to this particular part of it, which is set forth in that part of my letter of the 24th of November (No. 12), which is written in red ink.* I would very respectfully suggest to Your Grace, before reading this present communication any further, to read all the correspondence, and to begin with that portion of my letter (No. 12) which is written in red ink. Supposing that Your Grace has done this, I will now proceed without any further reference to the conversation than will naturally arise in the discussion of points in the letters. Your Grace will observe that I made a memorandum of the conversation immediately after its occurrence. My reason was that I thought it probable that some question might at some time arise as to its exact purport; and the prudence of such a course has been proved by the fact that in his letter of the 25th, His Excellency admits the accuracy of my ver-

* The part of letter No. 12 referred to as written in red ink, is from the words, "My recollection of what passed at our interview," to the end of the letter.

sion of the matter in my letter of the 24th, as compared with what he had stated in his communication of the 21st (No. 8) as to his own recollection on a particular point. His Excellency having at the close of our interview left it in doubt whether he would disclose the names of his informants, I expected some communication from him, but having waited ten days and received none, I wrote the letter (No. 1) which is the commencement of the correspondence. In this letter I respectfully stated the reasons why I considered myself entitled to the information which I sought, and I assumed, as I had assumed in conversation, without any contradiction from His Excellency, that the objection to the disclosure originated with his immediate informant, between whom and the originator of the statement—as His Excellency in conversation made out their positions to be very different with respect to me—I was willing to admit some distinction, though I asserted my right to know the names of both. From His Excellency's answer (No. 2), and from passages from his subsequent communications, it appears that the objection is His Excellency's own, and purely spontaneous, and that he considers these persons entitled to his protection, and exercises that protection by withholding their names; and by this answer also, these two persons are placed in the same category as having both done their duty “to the Queen and to Her Representative in this Colony in apprizing him of what they doubtless believed to be a very gross breach of duty on the part of a servant of the Crown.” In my letter of the 17th I announced, and in my letter of the 21st I fully explained, the course which I conceived that I had a right to pursue; and I also respectfully intimated my dissent from His Excellency's appreciation of the conduct of his informants, whomever they might have been—excepting only His Excellency's two sons-in-law, in case of either of them having been one.

In His Excellency's communication of the 17th November, (No. 4) he calls the conversation of the 5th a “private conversation,” and expresses an opinion that I should not be justified without permission from him in making known what passed at it, (meaning, of course, on the particular subject to which I had referred, and which was all that I had stated my intention of making known,) and he refuses me that permission. Now, on this point as to the privacy of the conversation, I very respectfully refer Your Grace to my correspondence with His Excellency; and here I will say no more than this, that the only thing private between His Excellency and myself was the altogether unimportant fact that His Excellency had spoken

to me on the subject. The matter of his statements was known to three other persons at least—perhaps to many more—and on two out of these three there was no obligation to keep secret the fact, that they had stated about me what they had afterwards admitted to be unfounded; and, moreover, the matter was of importance only to myself, and to these two persons whom His Excellency had been pleased to take into his confidence and protection, while denying to me the most ordinary right, namely, that of knowing the names of men who had charged me with conduct which would have been, to use His Excellency's own words, "a very gross breach of duty."

In the same letter His Excellency intimates an opinion, that the expressions which I applied to his informants are scarcely courteous to himself. I was somewhat surprised at this. In the course of our conversation—as will appear on reference to the statement of it in my letter (No. 12)—I had used more forcible expressions without any comment from His Excellency; and besides, in writing I was careful, while expressing my disdain for them, to guard against any the slightest implication of disrespect to His Excellency. I regret that His Excellency's view of a question like this should differ so widely from mine, but according to my opinion of what is respectable and honorable and gentlemanly—I use the last word, because His Excellency in his communication to me of the 21st of November (No. 8) for the first time calls these persons "gentlemen"—the carrying of a tale like this, even if instead of being altogether unfounded it had been perfectly true, was not the part of a respectable or honorable man, or of a gentleman, but the trick of an informer or a busy-body. In this reiteration of my opinion, I mean not the slightest disrespect to His Excellency, it is the opinion which I expressed from the first—and at the first without any comment from His Excellency—and I cannot recede from it. His Excellency, at the conclusion of the letter of the 17th, suggests that I should appeal to Your Grace. In my letter of the 18th (No. 5) I declined to act on this suggestion, but I respectfully asserted my right, the exercise of which I never supposed that His Excellency would positively prohibit, to use the information which I possessed, for the purpose of obtaining that which I wanted. In a letter of the 19th (No. 6), His Excellency lays his commands on me formally not to make any use whatever of what passed during our conversation. Compliance with this command would have prevented me not only from making any allusion whatever to the conversation, but from making any enquiry for the purpose of ascertaining

who were His Excellency's informants; because for the latter purpose—even though I should not refer to the circumstance that such a conversation had taken place—I must make use of facts that I knew only from the conversation. I conceived that obedience to such a command would have involved an abandonment of all independence of character and self-respect; and in my letter of the 20th (No. 7) I declined, in terms, I trust, of proper respect, to comply with it; and being anxious to avoid actual conflict with His Excellency, I entered at some length into a review of the question, in the hope that an accommodation might still take place. To this last letter I received an answer dated the 21st (No. 8). In this answer His Excellency complains that the course taken by me is unusual and inconvenient; he intimates that my refusal to obey any command of his ought to have been accompanied by a tender of my resignation; and he proceeds further to point out, that I might appeal to Your Grace. On this last point I will only say, that from the first suggestion by His Excellency of an appeal to Your Grace, I determined not to initiate any such appeal. As to the inconvenience of the course pursued by me, with all respect I must say, I do not see it; as to its being unusual, so are the circumstances in which I am placed; and from the doctrine as to the propriety of resignation on my part, I must very respectfully dissent. About my appointment and service I shall say something further on; here I have to observe, that in this Colony we have no party Government; that my duties are professional, not political—though even if these points were reversed and unanimity of opinion between the Governor and subordinate officers were more essentially necessary, subserviency such as is required of me could scarcely be deemed a condition of it;—and that the *dictum* of His Excellency goes to this extent, that I am bound to obey any order that he may give, whether it relates to my official duties or not, or to tender my resignation—a conclusion which, I think, can scarcely be maintained. On the other hand, I respectfully maintain, that without reference to the merits of the case, commands of this sort, relating to matters out of the range of my official duties, cannot be imposed on me, so as to subject me to the alternative of compliance or resignation; and that as regards the merits of the case—which I shall sum up as shortly as possible further on—if I am right, I am entitled to maintain my ground, leaving His Excellency, if he should think fit, to submit the matter to Your Grace. His Excellency then proposes that he shall lay the whole matter before Your Grace; that I shall make a representation on the subject;

and that I shall take no further steps pending Your Grace's decision. The rest of His Excellency's communication relates to the terms which I had applied to the conduct of his informants, about which I think it unnecessary to add anything to what I have written here, and in my correspondence with His Excellency. In my letter of the 22nd (No. 9) I announced in general terms my acceptance of His Excellency's proposal, reserving a more particular statement of my understanding of it; and in this letter I put a question to His Excellency on another point. Some days before my interview with His Excellency, I had been informed that he had expressed an opinion in writing, that either the Attorney-General or myself must have furnished information to serve for the foundation of some part or parts of one or both of Mr. Winter's Memorials. At the time of hearing this, I did not consider it necessary to notice it; but after some reflection, on the 22nd I came to the conclusion that as so much discussion had taken place between His Excellency and myself on the subject of a charge relative to one of these Memorials which had been made against me, it would be better to come to an explanation with him on this particular point. I had in the meantime borrowed from Mr. Winter copies of both his Memorials. I stated this to His Excellency, and respectfully requested that if he had coupled my name with these Memorials, or either of them, in any such manner as above mentioned, he would be pleased to specify to me to what portion or portions he intended to refer. In his answer, dated the 24th, (No. 10) he declines to give me any information, on the ground that he had consulted with the Attorney-General and the Acting Government Secretary alone on the subject, and that it would be irregular and prejudicial to Her Majesty's service to admit the propriety of any such request. With all respect for His Excellency, I cannot see the force of this reasoning. If the information given me was incorrect, His Excellency might at once have said so, and there would have been an end of the matter; if it was correct—and the natural inference now is that it was so—certainly I was not asking too much in requesting to be allowed an opportunity of removing from His Excellency's mind an erroneous impression, injurious to me. I cannot perceive what irregularity or detriment to the Queen's service would have been involved in doing what would have been simple justice to me. But in addition to this refusal, this letter of the 24th clearly conveys an imputation against me of co-operation with Mr. Winter in his Memorials. I could only put this construction on it, but I was willing to believe that something else than the natural impli-

cation from the words was intended. I immediately wrote my first letter of the 24th (No. 11), in which I drew attention to the necessary inference from the words, and asked for an explanation. On the same day I wrote, in reply to His Excellency's letter of the 21st, my letter containing a full statement of my understanding of the terms proposed by His Excellency for submitting the matter to Your Grace, and for the purposes mentioned in my letter, I added a statement of the conversation which had taken place at our interview on the 5th. As to the reference to Your Grace, His Excellency had proposed himself to lay the whole matter before Your Grace, and send on any representation that I might wish to make. I respectfully asked for a copy of any statement that His Excellency might make to Your Grace, in order that I might clearly see what would be the best way of framing my answer to it. I knew, of course, that His Excellency would be at liberty to comment fully on my answer; but His Excellency, in his communication of the 25th (No. 13), declares this request to be wholly inadmissible, and informs me that his Despatch to Your Grace would be a report on my representation to you. On the other subject, namely, my request for some explanation of the passage in His Excellency's communication of the 24th, all explanation is refused, and in a manner which conveys a reiteration of the imputation on me. In this letter of the 25th, His Excellency is also pleased to observe, that I have assumed a position which I should not have assumed without tendering my resignation, and that by my own proceedings, official relations between His Excellency and myself have been rendered undesirable. If by this His Excellency means that he intends to recommend my removal from office, such a proceeding would be inconsistent with the terms of his letter of the 21st with which I have complied. As to the undesirableness of further official connection between His Excellency and myself, I ask only for justice at your Grace's hands. That the present relation between His Excellency and myself is the result of my own proceedings, I cannot admit. I must observe that His Excellency chose to impart to me a portion of a matter relating to myself alone, and which it concerned me to know the whole of; that but for his partial disclosure of the matter I might probably never have heard of it; as the Attorney-General is not likely to have spoken of it, and his Excellency might have endeavoured to impose silence on his informants; but that as he had voluntarily disclosed so much, I was entitled to ask for the rest, which alone was of consequence to me; and that, my request being refused, I then became entitled

to use the information which I possessed, for the purpose of obtaining a complete knowledge of the matter. His Excellency originated the position. I have only acted in self-defence and in proper self-assertion. I will add here all that I think it necessary further to say on the subject of my rights, first to know from His Excellency the names of his informants, and next, on his refusal of the information, to seek for it otherwise. Informers in Criminal Cases are protected by having their names concealed; because, however infamous, they are considered necessary; and one chief reason for such protection is, that the vile estimation in which they are held, renders it needful. But no such necessity for a Governor to receive secret information of the acts of Officials, who should enjoy the benefit of being supposed to be honorable men, can be adduced as an argument for concealing the names of the Governor's informants. Besides, whatever my opinion of them, they are called by His Excellency: "gentlemen" and "meritorious;" and if his view of their conduct were correct, my individual estimate of it could not tarnish the credit which they would acquire by publicity. And to follow out this reasoning—if they have acted the part of meritorious gentlemen; and if His Excellency has done what is right in telling me of their acts, but concealing their names, what harm could result to any body—unless indeed discredit should attach to me—from my making inquiries which on this supposition I ought to refrain from making! Another argument in favour of my right to know the names of these persons is founded on social reasons. If these persons are gentlemen by position in life, I may be constantly brought in contact with them in a small society like ours, and I conceive that I ought to be placed in a position which would enable me to guard against such contact.

There are other tests specially applicable to this question and conclusive to my mind, but apparently unappreciated by His Excellency. I believe it to be universally admitted, that a subordinate officer, called upon by his superior to answer a charge, has a right to know who is his accuser. Still he has no better right, than the subordinate who is informed by his superior, that a charge has been made against him, which he, the superior, has received and entertained, and has not proceeded with only because it has been admitted to be unfounded. The original want of foundation, as indicating impatience to do injury, if not reckless malevolence, strengthens the claim to disclosure. If His Excellency's view were correct in principle, it would follow that a subordinate officer might be called upon to answer a charge,

the name of his accuser being concealed. And it would not be carrying the process any further, to hold that he might be called upon to answer a charge altogether anonymous; for a charge the name of the maker of which is concealed has, as regards the person to be affected by it, the odious character of an anonymous charge.

His Excellency too has lost sight of this necessary consequence, namely, that if he is justified in having dealt with me as he has, Your Grace as His Excellency's superior officer would be justified in dealing in a similar manner with him. I am as perfectly sure that Your Grace is incapable of so dealing with His Excellency, as I am that he would strenuously object to being so dealt with.

The manner in which His Excellency had closed our correspondence on the subject which I had opened on the 22nd, and my allusion to which, while refusing me all information and explanation, he made the ground for insinuating a charge against me as injurious as that originally made by his two informants, required to be answered. On the 28th and 29th, I wrote two letters (Nos. 14 and 15) explaining why I had not been able to send an answer. And on the 1st December I forwarded my letter dated the 29th Nov. (No. 16.) I had carefully read both Mr. Winter's Memorials, and it seemed to me that there were only two passages, one in each of them, with respect to which it was possible that his Excellency might—and then only without reflection—have expressed such an opinion as I have mentioned. As an assumption had been already made against me, I resolved that another should not be founded on my silence. I respectfully refer Your Grace to this letter, and to the correspondence (Letters A to L) between His Excellency and the Attorney-General, the substance of which is set forth in it, for the purpose of showing that I most conclusively demonstrated to His Excellency, not only that I had not given the information on which these two passages were founded, and that I had had nothing to do with either of the Memorials; but that my Brother, who acted professionally for Mr. Winter in drafting the Memorials, would not use the information which he had acquired from me, (under circumstances which I state in the letter, and long before the occurrences out of which the Memorials arose) and strictly confined himself in these two passages, as in the rest of the Memorials, to the instructions which he received from Mr. Winter, who derived his knowledge of them from rumours—correct as far as they want. In my letter of the 29th, I also submitted to His Excellency,

my construction of his offer to lay the whole matter before Your Grace, and my view as to the fairness of my being furnished with a copy of His Excellency's despatch to Your Grace. On the 2nd December, I received a communication (No. 17) from His Excellency. From this last letter I could not gather, whether His Excellency accepted my construction of his proposal, or whether he adhered to his intention of waiting until I should make a representation and reporting on it; and I thought it best to do nothing more until just previously to the departure of the Mail, and then to endeavour to ascertain what course His Excellency intended to pursue. With regard to the main subject of my letter of the 29th—namely the imputation on me of co-operation with Mr. Winter in his Memorials and on which His Excellency in his letter of the 2nd December declines further correspondence—I think, that without making any complaint, and without trenching in the slightest degree on the respect due to His Excellency, I may be permitted to state my opinion, that I have been treated without any of the consideration due to me not merely on the score of my official position, but which I may fairly claim as a gentleman of some character and standing in this community. Notwithstanding the tone of His Excellency's previous communications, I could not but expect that my letter dated the 29th would produce some explanation and amends from His Excellency, and I humbly trust that Your Grace will consider that I am fairly entitled to both. In the letter of the 2nd of December, His Excellency states his intention to transmit to Your Grace copies of my letters of the 15th, 17th, 18th, 20th and 24th of November and of his communications to me of the 15th, 17th, 18th, and 21st of the same month, and adds, that if I desire it, he will also send copies of my letters of the 22nd and 24th, (Nos. 9 and 11,) and of his communications of the 24th and 25th, (Nos. 10 and 13.) His Excellency makes no mention of my letter dated the 29th of November, or of his answer to it of the 2nd of December.

On the 6th of December, two days before the departure of the Mail, I wrote (No. 18) to His Excellency, requesting to be informed whether by the Mail about to leave, he proposed to carry out the intention announced in his communication of the 21st, of laying the whole matter before Your Grace. On the morning of the 8th, I received the letter (No. 19) dated the 6th, the important part of which is in the following:—"His Excellency has closed his despatch and has only transmitted that portion of the correspondence which relates to the point on which alone His

"Excellency is at issue with you." By "that portion of the correspondence &c.," I presume that His Excellency means my letters of the 15th, 17th, 18th, 20th and 24th and his communications of the 15th, 17th, 19th and 21st.

Finding that His Excellency had so far admitted the correctness of my construction of his communication of the 21st, as to take the initiative by writing a despatch and forwarding certain papers to Your Grace, instead of waiting for a representation from me and reporting on it, I hoped that he might possibly now be disposed to go further and to admit the fairness of my claim to have a copy of his despatch; and I immediately replied (No. 20) to his communication received on the 8th, enclosing a letter to Your Grace which you will have received, and requesting a copy of His Excellency's despatch to you. Your Grace will see that I was not in a position to make a representation on the merits of the case by the last Mail.

On the same day I received a communication from his Excellency, noticing an omission which I had made through haste and which I at once supplied, expressing surprise at my uncertainty—about which I will only say that I do not see how I could be otherwise than uncertain—and expressing surprise also at my application for a copy of his despatch, when I had been told that such a demand was "wholly inadmissible." I have already stated that I hoped that His Excellency might be disposed to modify his previous determination, and I had very strong reasons for desiring to know in what manner His Excellency might represent my conduct, and what particular statements he might make to Your Grace. I should suppose from the letter of the 21st that my request for the names of his informants, and the fact of my declining to obey the commands laid on me in the letter of the 19th, ought simply to be submitted to Your Grace. But the correspondence between His Excellency and the Attorney General (Letters A to L) shows, that His Excellency may change his intentions on a point of this sort, without deeming it necessary to give any notice of the change to the person whose interests may be affected by it. On the 7th of July His Excellency wrote a note (Letter B) to the Attorney General expressing certain views and intentions, and on the 8th, having entirely changed his views and purposes, he wrote to Your Grace a despatch (Letter E) altogether different in its tenor and the sequel to which (as shown by the subsequent correspondence) might, but for the circumstance of the preservation of the note of the 7th July, have proved most embarrassing to the Attorney General. It is impossible for me

to say whether His Excellency may not have changed his views as to what he would submit to ~~His~~ ^{Your} Grace in my case, and introduced topics of which I have no warning. I am not aware that His Excellency has any real cause of complaint against me; I am quite sure that I have never intended to give him any; but it is possible that stories as unfounded as the one relating to my handwriting may have been told to His Excellency, and that he may have mentioned them to Your Grace without communicating them to me. I disclaim all intention of casting the slightest reflection on His Excellency, but as His Excellency has in some respects maintained a reserve to me which, though he may deem it proper, in my opinion operates unfairly against me, I have considered it right to endeavour to guard against the effect of his possibly carrying his reserve to the point of making representations against me, without giving me an opportunity of answering them. I have been obliged to address Your Grace without knowing exactly what I have to answer. I have contented myself with stating facts and reasoning on them, avoiding all comments to which any exception could be taken; and I trust that Your Grace will consider that in the circumstances in which I have been placed, I have acted with moderation, and with proper respect to His Excellency and due deference to Your Grace. I humbly but confidently submit, that I am entitled to Your Grace's decision in my favour, as to my right to know the names of the persons who accused me to His Excellency; as to my right, on these names being refused, to make enquiries for the purpose of discovering them; and, lastly, as to my claim for some explanation and amends in relation to the matter first brought by me under His Excellency's notice in my letter of the 22nd November, and to the imputation cast on me in His Excellency's reply to that letter on the 24th.

In conclusion, as Your Grace knows nothing more of me than the fact that I am Solicitor-General, I humbly conceive that I may be excused for adding a few words about myself, my position in this community, and my appointment to, and services in, office. I have practised at the Bar of this Colony since August 1844, and since August 1856, I have been Solicitor-General, and during the whole period I have been somewhat conspicuously before the public. Until the charge made against me by His Excellency's informants, which was so closely followed by His Excellency's insinuation of misconduct as grave, nothing like an imputation has ever been cast on me as a public officer or as a gentleman. In February 1856, Mr. Craig, then Attorney-Gener-

ral, being absent on leave, and Mr. Smith being the acting Attorney-General, the place of acting Solicitor-General was offered to me by Sir Philip Wodehouse, who always from the commencement of our acquaintance honored me with his friendship, and treated me with great kindness. For reasons into which it is not necessary now to enter, I very respectfully declined the offer. I am happy to say, that my non-acceptance of it in no way impaired the good understanding between His Excellency and myself. The entire criminal business of the Colony being, in consequence of the riots of that year, too heavy for the Attorney-General alone, I received special commissions to conduct the prosecutions at the Sessions of Berbice in March, and of Essequibo in April. Intelligence of Mr. Craig's death arrived here in April, and Mr. Smith was appointed Attorney-General, subject to confirmation. In May, or early in June, Sir Philip offered me the appointment of Solicitor-General, subject to confirmation by Her Majesty the Queen. With all gratitude and deference to him, I told him that in my position at the Bar and in this community, it would be very unpleasant for me if I should be appointed by him, and Her Majesty's Government, knowing nothing of this, should in the meantime send out a man to fill the place, and that I should prefer being appointed by Her Majesty. He assented to this view, and communicated with the Home Government, and I was appointed by Mandamus of the 15th July, under the Sign Manual and Signet of Her Majesty, and was gazetted in this Colony on the 27th Aug. During the absence on leave of Mr. Smith for three months in 1857, I acted as Attorney-General, and I received a satisfactory letter from Mr. Walker, then Lieut.-Governor, and a vote of approval from the Elective Members of the Court of Policy (Letters a & b.)

Throughout my intercourse with Mr. Walker as Lieutenant-Governor, I have been honored with his kindness and friendship. I accepted the office of Judge Advocate when offered to me by Sir Philip Wodehouse, on the re-establishment of the Militia in 1856, and have ever since held it. I have never made an application for any office; but the resignation of either of those that I hold would involve one of these two implications, either that I am wrong and know it, or that being right, I have no means of redress; and I have perfect confidence that Your Grace's opinion will not sanction any such conclusion as is involved in either implication.

I have omitted to state how I came into possession of copies of the correspondence letters A to L. For the purposes of my letter of the 29th, it was necessary for me to refer to this corre-

correspondence; I recollected the substance of it, but wishing to be perfectly accurate, I wrote to the Attorney-General (letter c) stating why I required copies, and asking for them, subject to His Excellency's permission to him to give them. My letter was shewn to His Excellency, and the permission was granted, as appears by the Attorney-General's answer (letter d.)

I humbly apologise to Your Grace for the length at which I have written, but the importance of this matter, not only to my present position, but to my future prospects, must be my excuse.

I have the honor to be,

My Lord Duke, very respectfully,

Your Grace's most obedient humble servant,

J. TROUNSELL GILBERT,

Solicitor-General of British Guiana.

No. 24.

*Government Secretary's Office,
December 20th, 1862.*

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of the 18th instant, enclosing a communication to His Grace the Duke of Newcastle, and promising to send, if possible, on the next day, the copies of certain documents which are to form part of that communication.

However inconvenient it may be to reply to an incomplete communication, yet as the time for the departure of the next Mail is drawing near, His Excellency thinks it desirable that you should be made aware of his opinion on certain points. He has accordingly directed me to acquaint you, that he considers that you have not been furnished with any authority to communicate copies of a correspondence between him and the Attorney-General, of which you were originally made aware as the professional adviser of the latter. The Governor understands that a copy of your letter to the Attorney-General, asking for copies of this correspondence, and of the reply thereto, will be transmitted to the Secretary of State, who will thus be able to determine whether His Excellency's opinion is correct.

The Governor has directed me further to convey to you his opinion, that it was improper to communicate to your brother, Mr. Anglim Gilbert, any information whatever with reference to the correspondence between His Excellency and his Attorney-General, without having previously obtained permission to do so.

His Excellency has likewise directed me to state, that in his

opinion, the versions which you have given of conversations between him and the Attorney-General, and at which you were not present, are calculated to produce an erroneous impression, owing to various omissions, but as he does not admit the propriety of your referring to such conversations at all, he has not instructed me to make any explanation on the subject.

With regard to your inquiry as to the necessity of sending duplicate copies of enclosures, I am directed to inform you, that no duplicates will be required of your official correspondence with the Governor; but as you propose sending copies of letters of an unofficial character, and some of which are private notes between the Attorney-General and yourself, His Excellency must request copies of the papers marked A to L, omitting any official Despatches that may be included in that series.

I have the honor to be, Sir,

Your most obt. servt.,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,

Solicitor General, &c. &c. &c.

No. 25.

Georgetown, 22nd December, 1862.

His Excellency FRANCIS HINCKS, Esquire, C.B.,

Governor of British Guiana.

SIR,—I consider it only respectful to Your Excellency to reply to your communication of the 20th.

On the subject of the correspondence between Your Excellency and the Attorney-General, I have with all submission to make the following observations:—I was acquainted with the fact and the particulars of the correspondence; I was desirous of referring to it in a communication to Your Excellency; I asked the Attorney-General for copies, subject to Your Excellency's permission; the permission was granted; I used the correspondence for the purposes of my letter of the 29th November to Your Excellency; it has become necessary for me to forward that letter to His Grace the Secretary of State; with the utmost deference to Your Excellency I cannot see that there is anything wrong in my thus making the Secretary of State acquainted with what has passed between Your Excellency and the Attorney-General. I mentioned in my letter of the 29th November that, and why, my brother had been informed of the correspondence. Your Excellency took no exception to this in your answer of the 2nd De-

ember; my brother has not communicated his knowledge of the matter to any other person; and, I may add, that if he had not known of it before, it would have been necessary for him to have been made aware of it within the last few weeks for the purpose of assisting me in copying my correspondence with Your Excellency.

I have further very respectfully to remark, as regards two interviews between Your Excellency and the Attorney-General in April and on the 13th of September, which are referred to in my letter of the 29th November, that Your Excellency in your communication of the 2nd December took no exception to what I had stated with respect to the conversations at these interviews, and that I cannot gather now that there is any inaccuracy in the statements confided to me by the Attorney-General of the points in those conversations which I specified. These are the only conversations between Your Excellency and the Attorney-General to which I have made any allusion. Up to the 15th September I was informed exactly of the correspondence, and generally of these two conversations, between Your Excellency and the Attorney-General on the subject of his suit against Mr. Short. If anything subsequently passed between Your Excellency and the Attorney-General on the subject, I have not been informed of it.

I send herewith copies of my letter of the 18th, of Your Excellency's communication of the 20th, and of this letter (Nos. 23, 24, and 25,) which I very respectfully request that Your Excellency will be pleased to forward, with the letter covering them, to the Secretary of State by this Mail; and according to Your Excellency's permission with respect to the rest of the correspondence, I do not consider it necessary to send duplicates of these copies.

I also send, for transmission to His Grace, the copies mentioned in my letter of the 19th to him, namely, Nos. 1 to 22, letters A to L, and letters a to d.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

3.—A.

*Georgetown, British Guiana,
22nd December, 1862.*

To His Grace the Duke of Newcastle, K.G.,

Her Majesty's Principal Secretary of State for the Colonies.

MY LORD DUKE,—I have the honor to enclose for Your Grace's consideration copies of a correspondence of the 18th, 20th,

and 22nd of this month (Nos. 23, 24, and 25), which has passed between His Excellency the Governor and myself subsequently to the writing of my letter of the 19th to Your Grace. I would not trouble Your Grace to read this correspondence, but that I suppose that His Excellency may, in his report on my letter of the 19th, touch on some of the topics of his communication to me of the 20th.

I have the honor to be,

My Lord Duke, very respectfully,

Your Grace's most obedient humble servant,

J. TROUNSELL GILBERT,

Solicitor-General of British Guiana.

No. 26.

23rd December 1862.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter dated yesterday, and to acquaint you that your letters to the Secretary of State with their enclosures shall be transmitted to His Grace by the Mail which closes this evening.

I am, Sir,

Your most obedt. servant,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,

Solicitor-General, &c. &c. &c.

No. 27.—No. 1646.

31st December, 1862.

SIR,—I am directed by the Governor to acquaint you, that as the Attorney-General has accepted the office of Chief Justice provisionally, and will consequently be unable to discharge the professional duties of the former office, the Crown Solicitor has been instructed to place in your hands all business of the Crown that may require attention.

I am, Sir,

Your most obedt. servant,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,

Solicitor-General, &c. &c. &c.

No. 28.

Georgetown, December 31st, 1862.

SIR,—In answer to your letter of this day's date, I have very respectfully to state for the information of His Excellency the Governor, that his intimation to me conveyed in that letter shall be duly complied with.

I have the honor to be, Sir,

Your most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

Honorable W. WALKER,

Government Secretary.

No. 29.

Georgetown, 3rd January, 1863.

SIR,—I have very respectfully to state for the information of His Excellency the Governor, that the Crown Solicitor has placed himself in communication with me with respect to the Indictments to be preferred at the next Session of the Supreme Criminal Court; that according to our Criminal Manner of Proceeding, the framing and preferring of Indictments, and the conduct of the business of the Crown at the Supreme Criminal Court, are duties pertaining to the office of Attorney-General, and that as it is only in case of the absence or inability to act of the Attorney-General that the Solicitor-General is authorised to perform the duties of the Attorney-General under the Manner of Proceeding, and as there is now no Attorney-General, I am not in a position to do anything in the matter.

I have the honor to be, Sir,

Your most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

The Honble. W. WALKER,

Government Secretary.

No. 30.—No. 51.

5th January, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of the 13th instant, in which you state that according to the Criminal Manner of Proceeding in this Colony the framing and preferring of Indictments, and the conduct of the business of the Crown at the Supreme Criminal Court, are duties pertaining to the office of Attorney-General, and that as it is only

in the case of absence or inability to act on the part of the Attorney-General that the Solicitor General is authorised to perform the duties of the Attorney-General under the Manner of Proceeding, and there is now no Attorney-General, you are not in a position to do anything with regard to the Indictments to be preferred at the next Session of the Supreme Criminal Court on which the Crown Solicitor has placed himself in communication with you.

The Governor had, previous to the receipt of your letter, given his best consideration to the 92nd clause of Ordinance No. 27 of 1846, which provides that "in case of the absence or inability to act of the Attorney-General, the duties of his office may for all the purposes of this Ordinance be discharged by the Solicitor-General for the time being, or by any other person duly appointed by the Governor." His Excellency has no doubt in his own mind that notwithstanding his provisional appointment of Mr. J. Lucie Smith to be Chief Justice of British Guiana, the Letters Patent to that gentleman which have been issued under the Royal Mandamus, constituting him Attorney-General, are in full force and effect, and will continue so until revoked by Royal authority. If this were not the case, Mr. Smith, in the event of the non-confirmation by the Crown of the appointment provisionally conferred upon him, would have to be re-appointed Attorney-General under the authority of a new Mandamus. Moreover, in the Colonial Office Regulations, cap. 3, sec. 3, cl. 92, it is provided, that "if an office be vacated in any Colony by the death or removal of the holder, or by his temporary absence, the person appointed by the Governor to act in his stead, if holding an inferior situation, may receive half the salary attached to the superior office together with half the salary of *his own office*."

Under this Regulation Mr. Smith will, pending the signification of Her Majesty's pleasure, be entitled to draw only half the salary attached to his provisional office of Chief Justice together with one half of that of Attorney-General, which he could not do if the latter office were vacant.

It seems clear to the Governor, that in Mr. Smith's case the expression "his own office" in the Regulation applies to that of Attorney-General.

Assuming that the office of Attorney-General is not vacant, the Governor has had to consider whether Mr. Smith's provisional appointment as Chief Justice is a case contemplated by the Ordinance 27 of 1846, sec. 92. His Excellency finds on enquiry that in the year 1856 the Governor issued a special commission to you to act for the Attorney-General, who was then employed on other

duty by direction of the Governor, who apparently considered himself the proper authority to decide as to the question of "inability to act." It must, however, be sufficiently obvious, that if the office of Attorney-General be not vacant there is "an inability to act" caused by the acceptance by that officer of the provisional appointment of Chief Justice.

The Governor has thought it desirable that you should be put in possession of the views which he entertains on the subject referred to in your letter; but however confident he may be in the correctness of his own opinions, he readily admits that the existence even of a doubt on such a point renders fresh legislation desirable; and as he is further of opinion that provision should be made to meet the possible contingency of an actual vacancy in the office of Attorney-General, he has requested the Chief Justice to prepare a Bill, which it is proposed to introduce into the Court of Policy at a meeting to be held to-morrow.

I am directed to enclose a draft of the Bill which it is contemplated to introduce, and to request that you will acquaint me whether it will fully meet the difficulty which you find in conducting as Solicitor General the legal business of the Crown.

As it will be the duty of the Governor to explain to the Secretary of State his reasons for recommending fresh legislation on the subject, His Excellency trusts that you will favour him with the grounds on which you maintain that the office of Attorney-General is vacant. The point is one of considerable importance, as instances frequently occur in which officers holding their appointments under warrant from the Crown accept provisional and acting appointments from Governors without imagining that the validity of their former appointments is affected thereby.

I am, Sir,

Your most obedient servant,

W. WALKER,

Government Secretary.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

Enclosure in No. 30.

A Bill to provide for the discharge of certain of the duties of the Attorney-General in certain cases.

WHEREAS the office of Chief Justice of this Colony having become vacant by the death of the late incumbent thereof, His

Excellency the Governor has been pleased to appoint the Attorney-General of this Colony to fill up such vacancy until Her Majesty's pleasure shall be known, pursuant to the provisions of the Order in Council in that behalf; and whereas doubts have arisen as to the authority of the Solicitor-General of this Colony to discharge, pending the signification of Her Majesty's pleasure in the premises, the duties of the office of Attorney-General relating to the legal business of the Crown in this Colony: And whereas it is expedient to remove such doubts and also to provide in all cases for the discharge of the aforesaid duties in the event of the absence or inability to act from whatever cause of the Attorney-General, or in the event of a vacancy in the office: Be it therefore enacted by His Excellency the Governor of British Guiana, with the advice and consent of the Court of Policy thereof, as follows:—

1. Until Her Majesty's pleasure shall be signified in the premises by Proclamation by the Governor in the *Official Gazette*, and in the event of no person being appointed in the meantime to act as Attorney-General, it shall be lawful for the Solicitor-General for the time being, or for any Barrister-at-Law or Advocate specially appointed to act in that behalf by the Governor, to discharge all and every of the duties, and to exercise all and every of the powers, of the office of Attorney-General for all the purposes of the Ordinances Numbers 27 of 1846, 2, 3, and 17 of 1847, 29 of 1850, 17 of 1851, 1 of 1853, 26 of 1855, 2 of 1856, 25 of 1860, 13, 22, and 25 of 1861, and also of every other Ordinance relating to the Administration of Criminal or Civil Justice in this Colony, and further to discharge all and every of the duties of the said office of Attorney-General, in so far as the same relate to the legal business of the Crown in this Colony, Civil and Criminal.

2. During the absence of the Attorney-General from the Colony, or in the event of his being unable from whatever cause to discharge the duties of his office, or in the event of his employment upon other service within the Colony or elsewhere, or in the event of there being a vacancy in the said office, and no person in any such case being appointed to act as Attorney-General, the Solicitor-General for the time being, or any Barrister-at-Law or Advocate specially appointed to act in that behalf by the Governor, may discharge and exercise all and every of the duties and powers of the office of Attorney-General in so far as the same are specified and set forth in the last preceding section

3. Every Indictment or other Proceeding, Civil or Criminal,

preferred or filed on behalf of Her Majesty, under the provisions of this Ordinance, may be in the name of the Attorney-General, but the same shall be signed by the Solicitor-General for the time being, or by any Barrister-at-Law or Advocate specially appointed as aforesaid.

4. This Ordinance shall come into operation and take effect on the publication thereof.

No. 31.

Georgetown, 6th January, 1863.

SIR,—In answer to the communication from His Excellency the Governor of yesterday's date made through you—before submitting the grounds on which I maintain that “the office of Attorney-General is vacant,” or, to use my own words, that “there is now no Attorney-General”—I have to state, that, supposing for the sake of argument that Mr. Smith is Attorney-General as well as Chief Justice, the words “absence or inability to act” are not applicable to the position. The question is clearly not as to “absence,” and there is no “inability to act.” What precludes Mr. Smith from acting as Attorney-General is a *disability*, arising from the incompatibility of the performance by one man of the duties of the offices of Chief Justice and Attorney-General.

The grounds to which I have referred above are as follows :

1.—The appointment of Mr. Smith is absolute for the time being ; there is no other representative of the office of Chief Justice ; if the appointment is confirmed he will remain Chief Justice, and he must remain Chief Justice at least until the appointment is in some way cancelled ; and as a man cannot be Chief Justice and Attorney General at the same time, the performance of the duties of the two offices by the same person being impracticable, it follows that the office of Attorney-General is now vacant, or, in other words, “there is now no Attorney-General.”

2.—The appointment of Mr. Smith to the office of Chief Justice is a removal of him from the office of Attorney-General, and therefore creates a vacancy. The removal may prove to be temporary, and in that case the vacancy will be of no longer duration ; but still there is a vacancy for the time being.

3.—The Letters Patent appointing Mr. Smith Attorney-General, though not expressly revoked, (and, I presume, that if his appointment of Chief Justice were confirmed, the Letters Patent appointing him Attorney-General would scarcely be revoked ex-

pressly,) are not in full force and effect, and, in fact, have now no operation whatever, as their effect and operation are simply to authorise him to perform the duties of Attorney-General, which by his acceptance of the office of Chief Justice, he is precluded from performing. It is true that if Mr. Smith should not be confirmed as Chief Justice, there will be no necessity for a new Mandamus or fresh Letters Patent, but in the meantime the suspension of the force and effect of both, though, perhaps, temporary, is complete.

4.—The office of Attorney-General is now vacant, because so long as Mr. Smith remains Chief Justice, nobody can perform the duties of it without being appointed to it.

5.—An office to which an appointment can be made subject to confirmation, and in which a person so appointed to it could act until the cancelment of his appointment, must be vacant.

His Excellency has referred to a Colonial Office Regulation for the purpose of deducing from it an argument that the office of Attorney-General is not vacant, because by the Regulation Mr. Smith may draw half the salary of the office of Chief Justice and half of that of Attorney-General. The wording of Regulations of this sort is seldom very exact; but I would very respectfully point out to His Excellency, that, according to the words of the Regulation quoted, an office may be “vacated” by temporary absence of the holder, and that in almost all cases of temporary absence, the absent officer draws half his pay; so that the fact that a man draws half the pay of an office is no argument to prove that he has not “vacated” it.

With respect to His Excellency’s request that I will acquaint him whether the Bill of which a draft has been sent to me will meet the difficulty which I find in conducting as Solicitor-General the legal business of the Crown, I must very respectfully beg to be excused from giving an opinion on a draft of a Bill framed by His Honor the Chief Justice, and at the discussion of which I shall not have an opportunity to support any opinion which I may entertain.

I have the honor to be, Sir,
Your most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

The Honble. WILLIAM WALKER,
Government Secretary.

4.—A.

*Georgetown, Demerary,
5th January, 1863.*

To His Grace the Duke of Newcastle, K.G.,
Her Majesty's Principal Secretary of State for the Colonies.

MY LORD DUKE,—The death of Sir William Arrindell having made a vacancy in the office of Chief Justice of this Colony, and Mr. Smith, the Attorney General, having been provisionally appointed to fill the vacancy, I beg leave very humbly to offer myself as a Candidate for appointment by Her Most Gracious Majesty the Queen to the office of Attorney-General, in case of the confirmation of Mr. Smith as Chief Justice. In a letter addressed to Your Grace, dated 19th December, 1862, and forwarded through His Excellency the Governor by the last Mail, I had the honor to lay before Your Grace a statement of my official services; and I enclosed at the same time copies of a letter dated the 24th October, 1857, from Mr. Walker, then Lieutenant-Governor administering the Government of the Colony, and of a vote of thanks of the 22nd of the same month of the Elective Members of the Court of Policy, both relating to my performance of my duties as acting Attorney-General during three months of that year.

To this statement and these documents I now very respectfully refer Your Grace, and

I have the honor to remain, My Lord Duke,
Your Grace's most obedient humble servant,

J. TROUNSELL GILBERT,
Solicitor-General of British Guiana.

No. 32.

Georgetown, 5th January, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I have the honor to enclose (in duplicate) a letter addressed to His Grace the Secretary of State for the Colonies, which I very respectfully request that Your Excellency will be pleased to transmit to His Grace by the next Mail.

I have the honor to be, Sir,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 33.—No. 50.

5th January, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date accompanying an application (in duplicate) to His Grace the Secretary of State for the appointment of Attorney-General of this Colony, and to acquaint you that the same shall be duly transmitted to His Grace.

I am, Sir,

Your most obedt. servant,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

5.—A.

*Georgetown, Demerary,**7th January, 1863.*

To His Grace the Duke of Newcastle, K.G.,

Her Majesty's Principal Secretary of State for the Colonies.

MY LORD DUKE,—I had the honor to address Your Grace on the 5th, making application for the place of Attorney-General of this Colony in case of Mr. Smith's confirmation in that of Chief Justice.

Since then there have been certain occurrences—and especially the appointment of Mr. Norton as Attorney-General—on which I am desirous of addressing Your Grace, but as Mr. Norton's appointment was gazetted only last night, and as the Mail closes to-day, Your Grace will perceive that there is not sufficient time for me to send in a representation, and for His Excellency the Governor to report on it, so that the papers may go on by this Mail; and I have therefore very respectfully to request that Your Grace will be pleased not to come to any decision on the subject of the appointment to the office of Attorney-General until after the receipt of a communication which I shall transmit to Your Grace through His Excellency by the next Mail.

I have the honor to be, My Lord Duke,

Your Grace's most obedient humble servant,

J. TROUNSELL GILBERT,
Solicitor-General of British Guiana.

No. 34.

Georgetown, 7th January, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I have the honor to enclose (in duplicate) a letter of this day's date, addressed to His Grace the Secretary of State for the Colonies, which I very respectfully request that Your Excellency will be pleased to forward to His Grace by to-day's Mail.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor General.

No. 35.—No. 56.

7th January, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date accompanying a communication in duplicate addressed to the Secretary of State for the Colonies, and to inform you that the same will be duly forwarded to His Grace by this day's Mail.

I am, Sir,

Your obedient servant,

W. WALKER,
Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General.

6.—A.

*Georgetown, Demerary,
20th January, 1863.*

To His Grace the Duke of Newcastle, K.G.,
Her Majesty's Principal Secretary of State for the Colonies.

MY LORD DUKE,—I have now the honor to address Your Grace on the subjects to which I referred in my letter of the 7th. I shall state as shortly as possible the course that has been pursued with respect to the appointment of an Attorney-General, rendered necessary by the provisional appointment of Mr. Smith as Chief Justice.

Sir William Arrindell died on the 27th of December. On the 29th Mr. Smith was gazetted as Chief Justice, subject to the approval of Her Majesty, and until Her Majesty's pleasure should

be known. Mr. Smith's acceptance of the Chief Justiceship operated as ²removal of him from the office of Attorney-General to that of Chief Justice—the duties of the two offices being utterly incompatible—and left the office of Attorney-General vacant. Whether the vacancy would be rendered permanent, or should prove only temporary, was of no importance to the question. There was a vacancy for the time being. *De jure*, as well as *de facto*, there was no Attorney-General.

On the 31st I received an official communication from His Excellency the Governor to the effect, that as the Attorney-General had accepted the office of Chief Justice provisionally, and would consequently be unable to discharge the professional duties of the former office, the Crown Solicitor had been instructed to place in my hands all business of the Crown that might require attention.

I may say, without intending any disrespect, that I did not consider the phraseology of this communication to be legally accurate in relation to the circumstances; but I accepted it as intimating to me that I was to advise and to act with the Crown Solicitor in any legal business of the Crown which he might submit to me, and in which it was competent to me to act, and in that sense I on the same day answered the communication. I knew that there were many matters connected with the legal business of the Crown in which I could be of use; and, of course, it was my duty as regarded such matters to comply with the intimation of His Excellency. I knew, at the same time, that there being no Attorney-General, I had no authority to prepare or to sign indictments, or to conduct the business of the Crown in the Supreme Criminal Court; but it was not for me to assume, and to raise a discussion on the assumption, that I should be expected to do any of these things.

On the afternoon of the 2nd of January, the Crown Solicitor brought to me the depositions on which the indictments to be preferred at the Session of the Supreme Court to be held on the 27th were to be framed. I was absent from my office, and did not receive them until the 3rd, and on receiving them I immediately wrote to His Excellency ^{through} the Government Secretary stating why I was not in a position to act in the matter. In this Colony the Criminal business of the Crown in connection with the Supreme Criminal Court is regulated entirely by Ordinance No. 27 of 1846, and certain Ordinances amending it. In section 92 of Ordinance No. 27 of 1846, is to be found the only provision for the performance by the Solicitor-General of the duties of the Attorney-Gener-

ral in relation to such business. It is not necessary to enter into any discussion as to the effect of that section. It seems to be admitted—as, indeed, it cannot be for a moment doubted—that the section applies only when there is an Attorney-General, and not when the office is vacant. And in addition to what I have said at the commencement of this letter on the subject of the vacancy of the office, I refer Your Grace to my communication of the 6th to His Excellency.

On the 6th I received a communication from His Excellency, stating certain reasons why His Excellency considered that the office of Attorney-General was not vacant, referring to an occasion on which I acted by special appointment of the Governor in 1856, and requesting my opinion on a Bill, a draft of which was enclosed.

On the 6th, I sent an answer pointing out, in the first place, that if, for the sake of argument, Mr. Smith were admitted to be Attorney-General as well as Chief Justice, the provisions of the 92nd section of Ordinance No. 27 of 1846 would still not apply—showing, in the second place, that the office of Attorney-General was vacant; and, lastly, respectfully begging to be excused from giving any opinion on the draft of the Bill.

I did not make any reply to that part of His Excellency's letter where he observes that I acted under a special commission in 1856, and that the Governor then apparently considered himself the proper authority to decide as to the question of "inability to act" on the part of the Attorney-General; but it is as well, perhaps, that I should now say, that in 1856, on three occasions previous to my appointment as Solicitor-General, I performed the duties of the Attorney-General in the Supreme Criminal Court, under special commissions from the Governor, stating the inability of the Attorney-General to discharge such duties, and that since my appointment as Solicitor-General, I have on various occasions performed the duties of the Attorney-General in the Criminal Court, on his statement that being required to do legislative business, he was unable on those occasions to attend the Criminal Court. The fact of the Attorney-General's inability to act, I of course never thought of questioning. But the point on which it was necessary for me to come to a conclusion on the 3rd January was purely one of public law, with respect to which I must rely on my own opinion as a professional man.

On the 6th of January, the Bill of which His Excellency sent me the draft, was introduced into the Court of Policy. If it

had been passed, I should, of course, have performed any duties that might in consequence have devolved on me. It was not passed. It is not necessary for me to say anything about its provisions, as from His Excellency's communication to me of the 5th, it appears that he intended to address Your Grace on the subject. On the evening of the 6th, Mr. Norton was gazetted as Attorney-General. I will only say of Mr. Norton, that he has been in this Colony for a little more than two years. My own standing at the Bar, and my official service, I have sufficiently referred to in a former letter to Your Grace. It may be inferred from the observations of His Excellency in the Court of Policy on the 6th, as reported in the local newspapers, that but for the differences between us which have been submitted to Your Grace, I should have been appointed Attorney-General, subject to Her Majesty's approval, and until Her Majesty's pleasure should be known. If, then, I may assume, for this, as well as for other reasons, that these differences apart, my position would have given me a claim to the appointment, I humbly submit to Your Grace, with all respect for His Excellency, that, pending Your Grace's decision, I was entitled to all the advantages of my position, and that if it was necessary provisionally to appoint an Attorney-General, I ought to have been appointed.

As His Excellency, according to his reported observations in the Court of Policy, appears at first to have considered it inexpedient to appoint an Attorney-General, the fact of such an appointment would show that he must afterwards have considered the necessity for it to exist; and from his having ultimately done through necessity what he had at one time considered inexpedient, it must further be inferred that His Excellency had come to admit the correctness of my opinion as to the vacancy in the office of Attorney-General, for otherwise it may be presumed that he would have endeavoured to procure an unofficial member of the Bar to act by special appointment under section 92 of Ordinance No. 27 of 1846, in the same way as he had proposed that I should act *ex officio* under that section.

His Excellency is reported to have stated in the discussion in the Court of Policy, that there were weighty objections to my being appointed Attorney-General, and to have intimated, not directly, but by implication, that there was a want of cordiality between us—but to have added, that he did not mean to say that it was impossible for me to act cordially with the Governor.

From these remarks, it would seem that His Excellency meant that he considered that pending Your Grace's decision on

the differences between His Excellency and myself, he ought not to appoint me Attorney-General, notwithstanding that there might prove to be no actual difficulties in the way of my acting with him. I have already submitted to Your Grace how the mere fact of my not being appointed makes an actual change in my position in the meantime; and I could wish that as no explanation relative to our differences could be given, any such reference to them had not been made; but as I have always respectfully abstained from any comments on such views of His Excellency as I could not avoid differing from, I will only say now, that if His Excellency had been pleased to offer me the appointment, I should most readily have accepted it; and the matters between us which have been submitted to Your Grace would have made no difference as to the performance of my duties, or as to my conduct in my new relation with His Excellency. I know the obligations attaching to the post, and should have accepted them. I did not apply to His Excellency for the place, because, all things considered, I thought that it would be more becoming that I should not do so, and because, as regards an appointment of this class, the mere fact of an application would never influence the decision of any Governor.

It is true that in 1856 I declined an acting appointment as Solicitor General, while Mr. Smith was acting as Attorney-General in the room of Mr. Craig, absent on leave. I had special reasons for not desiring a temporary acting appointment, and I knew that the Government would not be embarrassed by my declining it. I gave all the assistance that was required of me acting under special appointments.

Later in the year when, after Mr. Craig's death, the provisional appointment was offered to me, I preferred waiting for the appointment from the Home Government. My reasons were, that Mr. Craig had died in England, and that Mr. Smith's appointment had been already confirmed before the Solicitor-Generalship was offered to me; so that it was by no means improbable, if I accepted the provisional appointment here, that before the Governor's recommendation of me could arrive in England, some one might be sent out. I should have had no such motives recently for not accepting the appointment of Attorney-General, because there would have been no knowledge of a vacancy before the receipt of the intelligence of the appointment; and I should have presumed that if Mr. Smith were confirmed as Chief Justice, I should also be confirmed as Attorney-General.

In conclusion, I have only to add, that humbly conceiving

myself to be in the right as regards the differences which, to my regret, have arisen between His Excellency and myself, and which are before Your Grace for decision, I trust that Your Grace will not consider that my conduct in respect of those differences has in any way disqualified me for the appointment for which I have made application to Your Grace.

I have the honor to be, My Lord Duke,
Your Grace's most obedient humble servant,
J. TROUNSELL GILBERT,
Solicitor-General of British Guiana.

No. 36. *Georgetown, 20th January, 1863.*

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I have the honor to submit to Your Excellency duplicate original of a letter to His Grace the Duke of Newcastle. The original, with the copies to which I have referred, shall be sent to Your Excellency either to-morrow or the next day. As Your Excellency has in your possession either the originals or copies of these documents, I presume that it will not be necessary for me to send duplicate copies.

I have the honor to be, very respectfully,
Your Excellency's most obedient servant,
J. TROUNSELL GILBERT,
Solicitor-General.

No. 37.—No. 116. *21st January, 1863.*

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of yesterday's date, enclosing duplicate original of a letter to His Grace the Duke of Newcastle, the original whereof, when received, will be duly transmitted to His Grace.

I am to add, that it is unnecessary to trouble you to furnish copies of the documents accompanying the letter to the Secretary of State.

I am, Sir,
Your most obedt. servant,
W. WALKER,
Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

No. 38.

Georgetown, 22nd January, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I have the honor to enclose original (duplicate sent on 20th) of a letter to His Grace the Duke of Newcastle, and certain copies mentioned in that letter; and I very respectfully request that Your Excellency will be pleased to transmit this original and these copies to His Grace the Duke of Newcastle by this Mail.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 39.—No. 129.

23rd January, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of yesterday's date enclosing a communication in original—duplicate whereof has been already acknowledged—addressed to His Grace the Duke of Newcastle, and to acquaint you that the same shall be forwarded as requested.

I am, Sir,

Your most obedt. servant,

W. WALKER,
Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

No. 40.

Georgetown, 23rd February, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—If Your Excellency has received by this Mail any Despatch from His Grace the Duke of Newcastle on the subject of the papers transmitted on the 22nd of December, I have very respectfully to request that Your Excellency will be pleased to communicate it to me, so that I may be aware of its contents before closing my letters for the return Mail.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 41.—No. 274.

23rd February, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date, enquiring whether His Excellency has received by this Mail any Despatch from His Grace the Duke of Newcastle on the subject of the papers transmitted on the 22nd December last; and, in reply, I am to acquaint you, that no such Despatch has been received by His Excellency.

I have the honor to be, Sir,

Your most obedt. servant,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq ,

Solicitor General, &c. &c. &c.

No. 42.

23rd February, 1863.

SIR,—I am directed by the Governor to acquaint you, that having referred to Her Majesty's Principal Secretary of State for the Colonies for his decision, the question raised by you in your letter to Mr. Acting Government Secretary Pollard of the 20th November last, as to the right of the Governor to lay an injunction on you not to institute certain inquiries, His Grace has stated in reply, that there is no doubt that such an injunction is within His Excellency's authority; but His Grace has neither fettered His Excellency's discretion by any instructions, nor has he directed any communication to be made to you.

The Governor does not allow himself to doubt that you will now be guided by his instructions on the subject which gave rise to this reference to the Secretary of State; but His Excellency desires to avail himself of the first suitable opportunity which has been afforded him of disclaiming the slightest wish to interfere with any enquiries which you on your own responsibility, and in the exercise of your own discretion, may think proper to institute on the subject of His Excellency's conversation with you on the 5th November last. The difficulty arose, as the Governor cannot but hope you will yet perceive, from your inviting the Governor's sanction to your enquiries at a time when you were aware that he had decided on refusing you all aid in obtaining information on the subject.

The Governor has never been able to reconcile the expression in your letter of the 17th November, "I deem myself at liberty to make known what has passed on the subject," with

your subsequent refusal to acknowledge his authority to give any instructions in the matter. Had the Governor allowed such an expression to pass unnoticed, it must, he thinks, be admitted that he would thereby have given a tacit assent to any proceedings which you might have felt it proper to take. His Excellency, with the views which he entertains, could not, directly or indirectly sanction such proceedings, and he was, therefore, very reluctantly compelled to assume the position of prohibiting enquiries of which he would have desired to hear nothing.

In communicating to you the decision of the Secretary of State, the Governor has thought it due as well as to himself as to you, that you should be made fully aware of the ground on which he felt it necessary to lay the command on you which you appear to have felt a difficulty in obeying.

I have the honor to be, Sir,

Your most obedient servant,

W. WALKER,

Government Secretary.

J. TROUNSELL GILBERT, Esq.,

Solicitor-General, &c. &c. &c.

No. 43.

Georgetown, 24th February, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,

Governor of British Guiana.

SIR,—Writing yesterday morning without the papers to refer to, I made a mistake in mentioning only those transmitted on the 22nd of December. I find that my representation to His Grace the Secretary of State was transmitted on the 19th, and that the copies referred to in it, some duplicates, and some correspondence subsequent to the draft of my representation, were transmitted on the 22nd. In order, therefore, that there may be no misapprehension on the subject, I have now very respectfully to request, that if Your Excellency has received by the last Mail, or the Mail before the last, any Despatch relating to any of the papers sent by me to Your Excellency on the 19th and 22nd of December, and all of which Your Excellency stated that you would forward on the 23rd, Your Excellency will be pleased to give me a copy of that Despatch.

With respect to Your Excellency's second communication to me of yesterday's date, I have very respectfully to request that Your Excellency will be pleased to inform me when the Despatch

of Your Excellency to which His Grace's Despatch, referred to in that communication, was an answer, was forwarded, and when the Despatch of His Grace was received by Your Excellency; and also that Your Excellency will be pleased to give me a copy of this last Despatch. Your Excellency has communicated to me some reference made by His Grace the Secretary of State to the commands which Your Excellency was pleased to lay on me on the, 9th of November. I would very respectfully request to be informed, whether His Grace, at the time of writing his Despatch, had before him all the correspondence between Your Excellency and myself up to, and inclusive of, the 22nd of November, when I acceded to the terms on which Your Excellency proposed to lay the whole matter before the Secretary of State; and if he had, whether Your Excellency has received any Despatch from His Grace referring to the two points raised by me previously to Your Excellency's command to me, namely, my right to know from Your Excellency the names of Your Excellency's informants, and my right, on Your Excellency's refusal to give me the names, to make enquiries myself for the purpose of ascertaining them. And if Your Excellency has received any such Despatch, I would very respectfully request to be furnished with a copy of it.

I am aware that I cannot ask for copies of these Despatches as a matter of right, but I venture to make the request, being aware that Your Excellency was pleased in September last to forward to the then Attorney-General a copy of a Despatch relating to him. If, however, Your Excellency should not be pleased to give me the copies, then I would very respectfully request to be made acquainted with the contents of all Despatches which Your Excellency may have received relating to the correspondence between Your Excellency and myself in November and December last.

I must beg leave, with the utmost respect, to be permitted to say, that I do not understand the following passage in Your Excellency's communication of yesterday:—"The Governor does not allow himself to doubt that you will now be guided by his instructions on the subject which gave rise to this reference to the Secretary of State, but His Excellency desires to avail himself of the first suitable opportunity which has been afforded him of disclaiming the slightest wish to interfere with any enquiries which you, on your own responsibility, and in the exercise of your own discretion, may think proper to institute on the subject of His Excellency's conversation with you on the 5th November last."

Your Excellency was pleased to lay certain commands on me formally. I never received any instructions from Your Excellency. I now gather, that, with respect to those commands, and my refusal to obey them, the Secretary of State has expressed an opinion; but that he has not given Your Excellency any instructions, or desired Your Excellency to make any communication to me, on the subject. It would also appear that Your Excellency now leaves it to me to make any inquiries that I may think proper. No such inquiries on my part are necessary. I have learnt—purely by accident, and without any inquiry on my part, and I now know, beyond all doubt—that Mr. Cuckow and Mr. W. B. Pollard were the two persons through whom the unfounded statement relating to me reached Your Excellency. I state this merely as a fact, and without any view of eliciting any confirmation, or any observation, from Your Excellency.

With respect to that part of Your Excellency's communication, which is subsequent to the passage above quoted, I must very respectfully, but at the same time very firmly, disclaim having ever invited Your Excellency's sanction to any inquiries of mine; nor did I ever ask, nor therefore could I have ever understood Your Excellency to refuse me, any aid in obtaining information.

Verbally, on the 5th of November, I asked Your Excellency for the names of the two persons through whom what amounted to a charge against me had been made to Your Excellency. On that occasion, Your Excellency at first refused to give me the names, but subsequently modified the refusal by saying you would consider the question.

On the 15th, having received no communication from Your Excellency in the meantime, I renewed my request in writing, and was met with a positive refusal.

On the 17th, I wrote to Your Excellency as follows:—"After the positive terms of Your Excellency's reply to my letter of the 15th, I should not again address you on the subject to which it refers, but that I consider it only candid to state, that, as the matter has now been communicated to the Acting Government Secretary in addition to the Attorney-General—to whom alone I understood Your Excellency at our interview to say that you had previously to that time mentioned it—and as the originators of the statement against me may have spread it much more widely than the contradiction, I deem myself at liberty to make known what has passed on the subject, especially for the purpose of procuring, if possible, the information which Your Excellency declines to give me."

Your Excellency's answer of the same date, through the then Acting Government Secretary, contains the following passage:—
 "I am directed by the Governor to acknowledge the receipt of
 "your letter of this day's date, and to acquaint you, in reply, that
 "His Excellency is of opinion that you are not justified in making
 "known what passed between him and you during a private conversation, without his express permission, which he is unable to
 "grant you."

On the 18th I wrote to Your Excellency a letter containing the following passage:—
 "I must apologise for putting Your Excellency to the trouble of reading another letter from me; but if
 "I were not to reply to Your Excellency's last communication, the omission might be construed into assent to the terms of it.
 "I must very respectfully state, that, in my judgment, none of the
 "characteristics of a private communication attach to what has
 "passed between Your Excellency and myself on the subject in
 "question; and this is the reason why I have not asked permission, and why I must still assert the right, to make the matter
 "known as I may consider necessary."

It is not necessary to quote any more of the correspondence. Not only so far, but throughout, my expressed determination was to act without Your Excellency's permission or sanction, which I held that I did not require, and, certainly, without Your Excellency's aid, which I never thought of hinting at; and neither in your communication of the 17th, nor in any subsequent one, did Your Excellency intimate to me that you considered that I was inviting your sanction, or asking your aid, towards the procuring of the information which I wanted, but you seemed to understand what I meant to express, namely, that I was determined to obtain in some other way the information which Your Excellency refused to give me. And throughout, Your Excellency's position was simply this, that I had no right to make any use whatever of what had passed between us in the conversation of the 5th of November.*

That the difficulty to which Your Excellency refers arose from any conduct of mine, it is impossible for me, with all deference to Your Excellency, to admit. If, instead of refusing me on the 17th of November permission which I did not ask for, and which on the 18th I disclaimed asking for, and of command-

* Up to the 23rd of February I had been commanded not to make inquiries, on the ground that the conversation was a private one, and that the Governor had a right to consider it confidential. On the 23rd February the "commands" were toned down to "instructions," and entirely different reasons were given for having imposed them.

ing me on the 19th not to do what I had claimed a right to do, Your Excellency had referred to my letter of the 17th in the terms of your letter of yesterday, no difficulty would ever have arisen between us; because to such a communication, at that stage of the proceedings, I should at once have replied, that I was prepared to act on my own responsibility, and in the exercise of my own discretion; that I required no permission or sanction, and desired no aid, from Your Excellency; and that as it was merely from a wish to be perfectly candid that I had stated my intention to Your Excellency, if Your Excellency desired to know nothing of my inquiries, you should hear no more on the subject from me. Towards the close of Your Excellency's communication, I find the expression "proceedings" used apparently in a different sense from "inquiries." If by this expression Your Excellency means to refer to any possible proceedings on my part in relation to Mr. Cuckow or Mr. Pollard, I have only to say, that my expressions both in conversation and in writing with respect to Your Excellency's informants, before I had any clue to their identity, are sufficient to show that while I claimed to know who they were, I held them beneath my notice.

In conclusion, I regret that it should have been necessary for me to address Your Excellency at such length, but it was impossible for me to admit the correctness of the inferences in Your Excellency's last communication; and I consider that it was incumbent on me to show that they were not deducible from anything that had emanated from me, and that they had never before been suggested.

I am happy to believe that when I get the information for which I have asked, there will be no necessity for any further correspondence.

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

No. 44.

25th February, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of the 24th instant, applying for certain information regarding His Excellency's correspondence with the Secretary of State, and stating your views on the subject of my letter of the 23rd instant, and I am to make the following reply thereto:—

With reference to your enquiries regarding the correspond-

ence adverted to, the Governor directs me to observe—1st. That he must decline furnishing you with copies of any Despatches until instructed to do so by the Secretary of State. 2nd. That whenever His Excellency shall be instructed by the Secretary of State to make any communication to you, his instructions will be obeyed without unnecessary delay. 3rd. That His Excellency will exercise his own discretion in making communications to you, when not instructed to do so, but must decline replying to any interrogatories on the subject of his correspondence with the Secretary of State.

The Governor regrets to perceive from your letter of the 24th, that my letter to which it is a reply, appears to have been misunderstood both in letter and spirit. As, however, His Excellency learns that the practical difficulty is at an end, owing to your no longer feeling any desire to institute inquiries on the subject of your conversation with him on the 5th November, he has directed me to confine my reply to the correction of the misunderstanding.

It was not the Governor's intention to recede in the slightest degree from the position which he felt himself compelled to assume in November last; but after receiving the Secretary of State's decision that the injunction which he laid on you was within his authority, His Excellency, in the hope that you would appreciate the conciliatory spirit in which he wished to act, directed me to point out to you, that he had never entertained any wish to obstruct your inquiries on the subject of his conversation with you, but that by volunteering to acquaint him with your intentions, you had placed him in a false position, and had compelled him to refuse permission to you to make use of your conversation with him.

The Governor had hoped that you would have perceived that the true solution of the difficulty, assuming, as he was bound to do, that you still desired to follow out your original design of making use of this conversation, was to withdraw your letter of the 17th November, or such portion of it as His Excellency considered objectionable. Such a withdrawal would have enabled His Excellency likewise to withdraw the instruction or command which he laid on you not to make use of that conversation.

There is one other passage in your letter to which the Governor has directed me to reply. It is that where you remark, that if instead of refusing you permission on the 17th November to do what you had claimed a right to do, the Governor had replied in the terms of my letter of the 23rd instant, no difficulty

would have arisen. The Governor does not venture to hope from the tone of your correspondence that he shall be able to convince you that you could have committed an error; but he directs me to point out to you, that you rendered all explanation on his part impossible to him when you adopted the line of insubordination to the authority of the Crown with which he is invested. You did not remonstrate against the Governor's refusal of permission to make use of his conversation with you, but you broadly asserted your right to do so in disregard of his opinion, and you then took the erroneous ground that His Excellency had exceeded the scope of his authority.

I have the honor to be, Sir,
Your most obedient servant,

W. WALKER,
Government Secretary.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

No. 45.

Georgetown, 25th February, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I must very respectfully submit to Your Excellency, that I am placed in a very unpleasant position, by having it stated to me by Your Excellency that His Grace the Secretary of State has expressed an opinion on one point arising in my correspondence with Your Excellency, which opinion Your Excellency is pleased to communicate to me, though you have received no instructions on the subject, and have not been desired to make any communication to me, while to my very respectful request for information, especially in relation to two points which arose previously to the point above referred to, Your Excellency gives a decided refusal. I merely state this by way of a very respectful protest (if I may be allowed, with all deference, to use the expression) against Your Excellency's refusal. Presuming that Your Excellency will adhere to it, I have not the slightest wish to put you to the trouble of a further reply.

Beyond my reference to this refusal, I shall not say anything on the subject of Your Excellency's last communication, as I am

afraid that any further correspondence might have an appearance of controversy, which I am extremely desirous of avoiding,

I have the honor to be, Sir, very respectfully,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

No. 46.

26th February, 1863.

SIR,—However unwilling the Governor feels to protract an unnecessary and painful correspondence, he cannot allow to pass unnoticed your letter of yesterday's date, in which you describe yourself as having been placed in a very unpleasant position by a communication from His Excellency, and add that you feel it necessary to enter a protest against his refusal to furnish you with certain information. The Governor has therefore directed me to place on record the exact circumstances of the case.

On the 19th December last, you addressed a letter to His Grace the Duke of Newcastle, transmitting certain correspondence, and submitting certain points, for the decision of His Grace. You were informed that your letter would be duly transmitted by the first Mail, and it was so transmitted.

On the morning of the 23rd instant, you addressed a letter to the Governor enquiring whether there had been any answer to that letter, and you were promptly informed that there had not. You were subsequently informed by me, that if the Governor should be instructed by the Secretary of State to make any communication to you, it would be made without any unnecessary delay.

Such are the facts with reference to your letter to the Secretary of State of the 19th December last. You were, however, well aware that by the Mail of the 8th December the Governor had felt it necessary to submit to the Secretary of State a correspondence between the Acting Government Secretary and yourself, which had resulted in a refusal on your part to obey a command of the Governor, on the ground that in laying it he had exceeded the scope of his authority. You had stated that you considered yourself at liberty to make use of information communicated to you by the Governor. You were informed, in reply, that you were not at liberty to do so without the permission of His Excellency, which he could not grant. You re-affirmed your right to make use of that information; the Governor then formally laid a command on you not to do so. You then distinctly refused to obey such a command, on the ground that the Governor had ex-

ceeded the scope of his authority. You were then informed, that under all the circumstances of the case, the Governor had determined to refer for the decision of the Secretary of State the point raised by you, that he had exceeded the scope of his authority, and it was suggested to you, that pending such reference, you should take no further action in the matter. To this you assented.

When, therefore, the Governor received the decision of the Secretary of State on the point submitted by him to His Grace, it was necessary for him to communicate it to you, and in doing so he adopted the most conciliatory course that it was possible for him to take. Meanwhile circumstances had altered.

You have admitted that you have no longer any object in instituting the inquiries which you desired to make in November last, and the question submitted to the Secretary of State by the Governor has consequently ceased to be of any practical importance.

In view of the facts, which the Governor hopes have been accurately though concisely stated, His Excellency cannot admit that you have been placed in an unpleasant position by any act of his, or that you have any just cause of complaint.

The Governor is not clear whether in your protest against his refusal to give you certain information you had reference to your application for copies of Despatches. You seem to be aware that you have no right to claim such copies; but the Governor presumes that you are acquainted with the regulations of the Colonial Service, by the 178th paragraph of which, "Governors are also "forbidden to give copies of the Secretary of State's Despatches, "or instructions, or to allow them to be taken, unless by desire of "the Secretary of State."

I have the honor to be, Sir,

Your most obedt. servant,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,

Solicitor General, &c. &c. &c.

No. 47.

Georgetown, 27th February, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,

Governor of British Guiana.

SIR,—I observe that Your Excellency characterizes our correspondence as "unnecessary." I respectfully admit that it is quite unnecessary to prolong it.

But Your Excellency will, I am sure, excuse my pointing out two errors in your last communication. The first is, where it is stated, that on the morning of the 23rd I enquired whether there had been any answer to my letter addressed to His Grace the Secretary of State on the 19th of December last. My enquiry was whether Your Excellency had received by the last Mail any Despatch from His Grace on the subject of the papers transmitted on the 22nd of December, (I should have said the 19th and 22nd of December, and I subsequently amended the enquiry,) and these papers comprised all the correspondence between Your Excellency and myself, including my letter in which I had declined to obey a certain command of Your Excellency.

The second is in the following passage:—"You were then informed, that under all the circumstances of the case, the Governor had determined to refer for the decision of the Secretary of State the point raised by you that he had exceeded the scope of his authority," that is, in imposing that command on me. Your Excellency here means to refer to your communication to me of the 21st of November.

The passage on this subject in that communication is as follows:—"While he has deemed it proper to point out to you the two courses, one of which, in his opinion, you were bound to adopt, if you felt the point at issue of sufficient importance to induce you to resist the wishes of the Governor, he is nevertheless of opinion, that under all the circumstances of the case, he will but consult the interests of the public service by laying the whole matter before the Secretary of State." This quotation shows that it was not this single point mentioned above which Your Excellency then announced your intention to submit to the Secretary of State. The "point at issue" here referred to as that which induced me to resist the wishes of Your Excellency, could not have been my refusal to obey Your Excellency's command which was imposed on me subsequently to my resistance to Your Excellency's wishes, which, I presume, are to be found in the expression of your opinion as to the necessity of your permission, and in the intimation of your refusal of that permission. The expression "the whole matter" is manifestly intended to include, and does include, not only the question as to my right to refuse to obey the command of Your Excellency, but the previous "point at issue" to which Your Excellency refers; and properly, it included two previous points, for there was one as to my right to the information from Your Excellency, and another as to my right, on Your Excellency's refusal, to seek for it myself.

I have not a copy of the Regulations of the Colonial Office, and was unacquainted with the regulation quoted by Your Excellency. If I had been acquainted with it, I should of course have presumed that Your Excellency, in giving the Attorney-General a copy of a Despatch in September last, was acting by desire of the Secretary of State, and I should not have made any request for copies of Despatches.

My very respectful protest is not against being refused copies of Despatches, but against being denied all information.

I have the honor to be, Sir, very respectfully,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,
Solicitor-General.

No. 48.

27th February, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date, from which he perceives that you are of opinion there were two errors in my letter of yesterday's date. With regard to the first point adverted to, the Governor regrets that your remarks should call for an explanation which, in his anxious desire to act in a conciliatory spirit, he had wished to avoid.

His Excellency desires me to observe, that he considered the first portion of your letter of the 24th instant offensive. There could have been no room for doubt as to the meaning of your first letter written after the arrival of the last English mail. Your object was to ascertain whether the Governor had received a reply to your letter to the Secretary of State, submitting certain points for His Grace's decision, and the answer might have satisfied you that no such reply had been received. But you apparently imagined that the Governor was capable of quibbling as to the precise date of your letter, or as to the particular Mail by which a reply might have been received. And you adopted a mode of interrogating His Excellency that he could not but feel was more suitable for the cross examination of a prevaricating witness in a Court of Justice than for a communication to the Representative of the Crown. The Governor did not condescend to notice the insinuation which your letter conveyed, but in general terms he gave you an assurance that there would be no delay on his part to communicate to you any reply which the Secretary of State might direct him to make to you.

With regard to the second point adverted to in your letter, the Governor is of opinion that the meaning of the expression "laying the whole matter before the Secretary of State" is sufficiently obvious, namely, that His Excellency would transmit the entire correspondence on the subject. His Excellency, however, must continue to maintain, that there was but one point in which he was interested, namely, the maintenance of his authority.

The Governor would have deemed it unnecessary to notice the last paragraph of your letter, but that his omission to do so might lead you to imagine that he had been instructed to give the Attorney-General a copy of the Despatch referred to. His Excellency was not so instructed, but on that occasion he took a responsibility which is very frequently assumed by Colonial Governors, of deviating from the strict letter of the Regulations. For such deviation, His Excellency is responsible to the Secretary of State, but they can form no precedent for such demands as yours.

I have the honor to be, Sir,

Your most obedt. servant,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,

Solicitor General, &c. &c. &c.

No. 49.

Georgetown, 27th February, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,

Governor of British Guiana.

SIR,—I respectfully conceive that it is better for me not to make any observations on the epithets which Your Excellency in your communication to me, dated to-day, is pleased to apply to my letter of the 24th. But I will, by way of explanation, very shortly state why I made the particular requests for information contained in that letter.

On the morning of the 23rd of this month, I wrote to Your Excellency requesting to have communicated to me any Despatch which you may have received from His Grace the Secretary of State by the Mail of the 22nd, on the subject of the papers transmitted by me on the 22nd of December.

Between 11 and 12 o'clock, I received a communication written by the Government Secretary by Your Excellency's direction, numbered 274, and stating that no such Despatch had been

received by Your Excellency. About an hour later, I received another communication written by the Government Secretary by Your Excellency's direction, not numbered, and in which I was informed that His Grace had expressed an opinion having reference to my letter of the 20th of November, which was one of the papers transmitted by me on the 22nd of December*. I could only reconcile the former of these two communications with the latter, by presuming that the former was the consequence of a want of accuracy and particularity in my letter of the 23rd of January. And I accordingly considered it desirable to be very exact in my letter of the 24th.

I have the honor to be, Sir, very respectfully,

Your most obedient servant,

J. TROUNSELL GILBERT, .
Solicitor-General.

No. 50.

28th February, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of yesterday's date, and to observe, in reply, that while His Excellency is ready to believe that when your letter of the 24th instant was written, you were labouring under a misconception, he cannot admit that any difficulty should have been experienced in reconciling the statements made in the two letters which I addressed to you on the 23rd instant.

It is perfectly true that reference was made in my second letter to a letter of your's dated 20th November, and that a copy of that letter was transmitted to the Secretary of State with the letter to which I had informed you there was no reply. But it is equally true that a copy of the same letter (20th November) had been transmitted by the Governor to the Secretary of State by the preceding Mail, and that Mr. Acting Government Secretary Pollard had, in a letter to you dated the 2nd of December, used the following language:—"In order to prevent misunderstanding, the Governor has directed me to acquaint you, that it is his inten-

* The first letter was numbered; the address on the envelope was in the handwriting of a Clerk in the Government Secretary's Office, and it passed through the office in the usual way. Any one employed there, and seeing it, if asked whether the Mail had brought any intelligence on the subject of my differences with the Governor, might, without any breach of confidence, have felt himself at liberty to answer—No. The second was not numbered, was addressed in the handwriting of the Government Secretary, and, being a contradiction of the first, was intended by the Governor to be private.

tion, in bringing before the Secretary of State your refusal to obey the command which he felt it his duty to lay upon you, to transmit to His Grace copies of your letters of the 15th, 17th, 18th, 20th, and 24th (No. 2) November, and of my letters of the 15th, 17th, 19th, and 21st of the same month." You were thus distinctly informed of the Governor's intention to transmit a copy of your letter of the 20th November to the Secretary of State by the Mail of the 8th December, and of the precise point which His Excellency considered it necessary to refer for His Grace's decision.

Adverting to the terms of my second letter of the 23rd inst., it is clearly indicated that the Secretary of State's opinion was given in answer to a reference made by the Governor, and not in reply to your letter.

Whatever misconception may have existed on the subject, the Governor cannot doubt that you now fully comprehend, that although he has received a reply to his Despatch transmitted by the Mail of the 8th December, he has not yet received one to that transmitted by the subsequent Mail, and in which your letter to the Secretary of State was forwarded.

I have the honor to be, Sir,

Your most obedt. servant,

W. WALKER,

Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,

Solicitor-General, &c. &c. &c.

No. 51.

9th March, 1863.

SIR,—I am directed by the Governor to acquaint you, that he has received a Despatch from Her Majesty's principal Secretary of State for the Colonies, acknowledging the receipt of the Despatch in which His Excellency transmitted to His Grace your letter of the 19th December last.

The Secretary of State has directed that it should be intimated to you that he had received, and had fully considered your letter with the enclosures; and that taking into account your disclosure to your brother of His Excellency's correspondence, and the fact that a portion of that correspondence was alluded to in a document drafted by your brother for Mr. Winter, whilst it seems highly improbable that the knowledge of it could have reached Mr. Winter or Mr. Anglim Gilbert from any other source, His

Grace is of opinion that the circumstances of the case taken altogether are such as cannot but impair His Excellency's confidence in you, though at the same time neither His Grace nor the Governor may impute to you any intention that the knowledge which you had communicated to Mr. Anglim Gilbert should be used as it was.

The Secretary of State has further directed that you should be informed, that it is not expected of the Governor of a Colony to retain the services of a law officer from whom he has reasonable grounds for withdrawing his confidence.

With regard to your alleged right to demand the names of those who had communicated to the Governor certain erroneous information which had reached them to your prejudice, the Governor has been directed to state, that as the information had been communicated to His Excellency in good faith, and in the discharge of a positive duty, and as the error (which was merely inadvertent) had fortunately been discovered, so that no prejudice accrued to you from it, His Grace sees no reason why the names should be communicated to you, especially as you seemed inclined to resent an accidental error as if it had been deliberate and malicious.

I have the honor to be, Sir,
Your most obedt. servant,

W. WALKER,
Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,
Solicitor-General, &c. &c. &c.

7.—A.

*Georgetown, British Guiana,
9th March, 1863:*

To His Grace the Duke of Newcastle,

Her Majesty's Principal Secretary of State for the Colonies.

MY LORD DUKE,—I have just received from His Excellency the Governor a letter, copy of which is enclosed. How much of this letter is warranted by Your Grace's Despatch, I have no means of ascertaining. It is useless for me to ask for a copy of the Despatch, because I am sure of its being refused. I must assume the substantial correctness of those parts of His Excellency's letter which purport to give Your Grace's opinions as to my right to know the names of the two persons who gave

His Excellency certain unfounded information relating to me, and as to the subject of the letter which I wrote to His Excellency on the 29th of November last in refutation of his insinuation that I had co-operated with Mr. Winter in one or both of his Memorials; though a statement (whether of Your Grace or His Excellency, does not by his letter clearly appear) which implies that Mr. Anglim Gilbert used information that he received from me, is a misstatement of fact. But on the assumption of the substantial correctness of His Excellency's letter—as I cannot submit to the imputations and the treatment involved in the expression of such opinions—I have the honor to tender to Her Most Gracious Majesty the Queen, through Your Grace, my resignation of the offices of Solicitor General and Judge Advocate of the Georgetown Militia, which I now hold; and I must request that my resignation of the former may be considered as dating from the first day of this year.

I have the honor to be, My Lord Duke,

Your Grace's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor-General.

No. 52.

Georgetown, 9th March, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—I have the honor to enclose for Your Excellency's information, and to request that you will transmit to the Secretary of State, by this evening's Mail, a letter to His Grace, (of which I send duplicate,) and the copy of Your Excellency's letter with it. I presume that the regulation requiring a communication to the Secretary of State to be sent in at least two days before the departure of the Mail will not be held to apply to one like the present.

I have the honor to be, Sir,

Your Excellency's most obedient servant,

J. TROUNSELL GILBERT,

Solicitor General.

No. 53.

11th March, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of the 9th instant, and to acquaint you, that

in accordance with the request therein contained, His Excellency duly transmitted your letter with its enclosures to the Duke of Newcastle by the Mail of that day.

The Governor has observed with regret an observation in your letter to the Secretary of State to the effect, that it does not clearly appear from my letter of the 9th instant whether a portion of the communication made by me to you on that day was the opinion of the Secretary of State or his own. The Governor has re-considered that communication attentively, and he must own himself at a loss to conceive how it could be more clearly conveyed to you than was done in that letter, that he was directed by the Secretary of State to communicate to you His Grace's opinions on the reference which you had made to him.

The Governor is of course responsible for having faithfully conveyed to you the reply which he was instructed to make, but in doing so, he did not presume to add any opinion of his own.

I have the honor to be, Sir,
Your most obt. servt.,

W. WALKER,
Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,
&c. &c. &c.

No. 54.

Georgetown, 16th March, 1863.

His Excellency FRANCIS HINCKS, Esquire, C.B.,
Governor of British Guiana.

SIR,—After some consideration, I have come to the conclusion to request that Your Excellency will be pleased to give me a copy of the Despatch of His Grace the Duke of Newcastle, which is referred to in Your Excellency's communications to me of the 9th and 11th of this month. I ask this neither as a matter of right, nor as a matter of favour, but I simply make the request as one with which Your Excellency may comply if you choose to assume the responsibility referred to in your communication to me of the 27th of last month.

I have the honor to be, Sir,
Your Excellency's most obedient servant,

J. TROUNSELL GILBERT.

No. 55.

16th March, 1863.

SIR,—I am directed by the Governor to acknowledge the receipt of your letter of this day's date, and in reply, to inform you, that you have been already furnished with the substance of the Secretary of State's Despatch to which you refer, and that His Excellency must decline communicating a copy of it to you.

I have the honor to be, Sir,

Your most obedt. servant,

W. WALKER,
Govt. Secretary.

To J. TROUNSELL GILBERT, Esq.,
&c. &c. &c.

No. 56.

26th March, 1863.

SIR,—I am directed by the Governor to acquaint you that he has received a Despatch from His Grace the Duke of Newcastle, Her Majesty's Principal Secretary of State for the Colonies, acknowledging the receipt of a Despatch in which His Excellency transmitted your letter urging your claims to the office of Acting Attorney-General of British Guiana.

His Grace had received and had duly considered your letter, but referred His Excellency to his recent Despatches, in which he has acquainted him that it is not expected of the Governor of a Colony to retain the services of a law officer from whom he has reasonable grounds for withdrawing his confidence.

I have the honor to be, Sir,

Your most obedient servant,

W. WALKER,
Govt. Secretary.

J. TROUNSELL GILBERT, Esq.,
&c. &c. &c.

Letter a.

Government House,
Demerara, 24th October, 1857.

MY DEAR SIR,—The return of the Attorney-General to the Colony having relieved you from the performance of his duties, I hasten to offer you the assurance of my cordial appreciation of the assistance you have afforded me, both as Law Adviser of the Government and in your place as an Official Member of the Court of Policy.

I shall have much pleasure in expressing to the Secretary of State my sense of your services, and if at any future time it should be in my power to promote your views in connection with the Government, I shall be highly gratified to do so.

Believe me, my dear Sir,
Yours very faithfully,

W. WALKER.

J. T. GILBERT, Esq.,
Solicitor-General.

Letter b.

EXTRACT from the Minutes of the Proceedings of the Honorable the Court of Policy of the Colony of British Guiana, at its adjourned Assembly, held at the Guiana Public Buildings, Georgetown, Demerara,
Thursday, 22nd October, 1857.

(After Prayers.)

On the motion of the Honorable Mr. Rose, seconded by the Honorable Mr. Clementson, the thanks of the Elective Members were tendered to Mr. Gilbert for his services as Acting Attorney-General.

True Extract,

J. GARDINER AUSTIN,
Ass. Secretary.

Letter c.

Georgetown, 29th April, 1863.

MY DEAR SIR,—Will you oblige me by reading the copies which I send you of two letters—one from myself to Governor Hincks, numbered 16, and dated 29th November, 1862, the other from Governor Hincks to myself numbered 51, dated 9th March, 1863, and purporting to give the contents of a Despatch from His Grace the Duke of Newcastle to the Governor. You will observe, in the former of these, what is stated by me as to your sources of information in relation to particular passages, one in each, of your Memorials to the Secretary of State; and in the latter, the aspersions which His Grace, if the Governor's version of his Despatch is correct, casts—firstly, on my brother and myself, by the unfounded insinuation that your very imperfect information on a certain point could scarcely have reached you or my brother in any

other way than through me—and, secondly, on my brother, by the as unfounded assertion, that in drafting your Memorials, he used information which had been communicated to him by me. No one knows better than you how unwarranted by facts are these aspersions; and I must beg that after having read the letters, you will further oblige me by answering the following questions:—

1st. Whether you ever derived from me, directly or indirectly, any information on which any part of either of your Memorials is founded?

2nd. Whether what is stated in your Memorials on the two points referred to in my letter No. 16, is not simply an embodiment of your instructions to my brother?

3rd. Whether you ever derived from my brother, directly or indirectly, any information whatever on either of these points?

4th. Whether your information on both points—the one in the first as well as the one in the second Memorial—was not derived from general rumour?

5th. Whether in my letter No. 16 you observe any inaccuracy in the statement of any fact within your knowledge?

I put these questions with the view of printing this letter and your reply along with some other papers for distribution among my friends.

I am, my dear Sir,
Very truly yours,

J. TROUNSELL GILBERT.

F. A. R. WINTER, Esq.

Letter f.

Georgetown, April 30th, 1863.

MY DEAR SIR,—Your letter of yesterday's date I duly received, and I have carefully read the letters, giving special attention to the passages in my Memorials to which you refer.

I have not the slightest hesitation in saying, that the insinuation that the knowledge of certain transactions alluded to in my Memorials could scarcely have reached your brother and myself from any other source than you, is utterly unfounded; and the assertion that your brother, in framing these Memorials, used information derived from you, is positively untrue.

I have much pleasure in replying to the questions you put to me, and shall answer them *seriatim*.

1st. To this my reply is, that I never derived from you, directly or indirectly, any information on which any part of either of my Memorials was founded.

You detail the only conversations which I believe we ever had on the subject, and you give the very words used by each of us, which prove that I was already in possession of current reports.

2nd. The statement referred to in each of my Memorials is only the embodiment of my instructions to Mr. O. A. Gilbert.

3rd. I never, directly or indirectly, received any information whatever on either of these points from your brother.

4th. The information on both points, one in the first, and the other in the second Memorial, was derived from general rumour—there was no secrecy about the matter—it was commonly talked of.

5th. I have carefully read your letter No. 16, and there is not any inaccuracy in any statement of any fact therein of which I have any knowledge.

I have given precise and categorical answers to your questions, that there may be no mistake about the matter, so as to remove at once all suspicion of the possibility of the existence of any foundation for the aspersions which have been cast upon you and your brother in connection with the Memorials which he prepared at my request, and solely from instructions furnished to him by me.

I am, my dear Sir,

Your's truly,

FRED. WINTER.

J. TROUNSELL GILBERT, Esq.,
&c. &c. &c.

GEORGETOWN, DEMERARA :
PRINTED AT THE "CREOLE" OFFICE, AMERICA-STREET,
1863.

2093

SIR ROBERT H. SCHOMBURGK.

<i>D^o</i>	<i>D^o</i>	<i>Venezue</i>
<i>D^o</i>	<i>D^o</i>	<i>Brazil.</i>



BRITISH GUIANA CATALOGUE.

NOTE.—From the late period at which a considerable portion of the specimens for exhibition was received, many of the numbers in this Catalogue have unavoidably been repeated, with a distinguishing letter.

SECTION I.—RAW MATERIALS AND PRODUCE.

(A.) MINERAL KINGDOM.

SUBSTANCES USED IN THE MANUFACTURE OF GLASS, POTTERY, AND EARTHENWARE.

1. **WHITE SAND.*** Contributed by T. M. POLLARD.
From *Mount Pleasant*, Waratilla Creek, River Demerary. This Sand has been exported to the United States of America for the purpose of glass-making.
2. **RED SAND.** Contributed by T. M. POLLARD.
From *Waratilla Creek*, River Demerara.
3. **WHITE SAND.** Contributed by T. B. DUGGIN.
From *Monte Video*, River Berbice, about 200 miles above its estuary.
4. **OREALA.** Contributed by T. B. DUGGIN.
A Decomposed Rock, believed to be valuable in the manufacture of Pottery. From the River Berbice.
5. **CLAYS and SAND.** Contributed by J. F. BEE.
Obtained at various depths from an Artesian Boring. This boring, four inches in diameter and 118 feet in depth, on Plantation *Woodlands*, one mile from the mouth of the Mahaica River, was executed between 6th and 22nd October, 1849, by Mr. John Allt. The water (much impregnated with iron) is delivered eighteen inches above the surface of the soil, and is greatly increased in quantity by the flood of spring tides, like all other Artesian borings of the colony. The following memorandum was taken during the process of boring:—
1 to 5 feet, surface soil; 6 feet, layer of caddy; 7 to 9 feet, blue clay; 9 to 39 feet, soft mud mixed with caddy, in which the auger went down by its own weight; 39 to 53 feet, rotten wood and pegass, or decayed vegetable matter; 53 to 55 feet, bluish grey clay, stiff; 55 to 57 feet, clay, a little red and grey; 57 to 70 feet, reddish clay; 70 to 82 feet 10 inches, yellowish grey clay, with a little sand and ochre, very stiff; 82 feet 10 inches to 86 feet 8 inches, bluish grey clay, streaked; 86 feet 8 inches to 92 feet, bluish grey clay, streaked, more yellow.
The bed of sand from which the water is obtained, was reached at a depth of 118 feet, and the same stratum was found at a depth of 125 feet. The numbers on the 31 specimens sent, indicate the depth in feet at which they were obtained.

* White Sand may be had in any quantity by sending for, at about 30 to 40 miles up the Demerary River.

(B.) VEGETABLE KINGDOM.

I. SUBSTANCES USED CHIEFLY AS FOOD, OR IN ITS PREPARATION.

6. **RICE.** Contributed by A. D. VANDER GON NETSCHER.
(*Oryza sativa*, Lin.) From Pltn. *Klein Pouderoyen*, River Demerary.
7. **RICE.** Contributed by T. B. DUGGIN.
From *Monte Video*, River Berbice. The colony of British Guiana is eminently favourable for the cultivation of Rice. It is worthy of remark, that three crops can be obtained *annually* in this colony from *one sowing*, the new crop ratooning or springing up from the old roots after each reaping.
8. **MAIZE or INDIAN CORN.** Contributed by A. D. VANDER GON NETSCHER.
(*Zea Mays*, Lin.) From Pltn. *Klein Pouderoyen*, River Demerary. The Maize grown in British Guiana commands a higher price in the market than that imported from the United States of America, from which the chief supply is derived: three or four crops obtained a year.
9. **MEAL from MAIZE or INDIAN CORN.** Contributed by A. D. VANDER GON NETSCHER.
From Pltn. *Klein Pouderoyen*, River Demerary. Extensively used as food and largely imported from the United States.
10. **PLANTAINS.** Contributed by A. D. VANDER GON NETSCHER.
(*Musa paradisiaca*, Lin.) Unripe, sliced, and dried in the sun. From Pltn. *Klein Pouderoyen*, River Demerary.
11. **PLANTAIN MEAL or CONQUIN TAY.** Contributed by A. D. VANDER GON NETSCHER.
From Pltn. *Klein Pouderoyen*, River Demerary. Recommended as a food for invalids.
12. **PLANTAIN MEAL.** Contributed by WILLIAM DAVISON.
From Pltn. *Vigilance*, East Sea Coast Demerary.
13. **PLANTAIN MEAL.** Contributed by H. T. GARNETT.
From Pltn. *Herstelling*, River Demerary. The following account of Plantain Meal is taken from the report of Dr. SHIER, "On the Starch producing plants of the Colony of British Guiana," page 16:—"The plantain has frequently been suggested as an article of export. In its ripe state no unexceptionable and sufficiently cheap method of preserving it has yet been suggested. It is sometimes so abundant and cheap that it might, if cut and dried in its green state, be exported with advantage. It is in this unripe state that it is so largely used by the peasantry of this colony as an article of food. It has always been believed to be highly nutritive, but I have not found in any sample of the dried plantain which I have analysed a larger amount than 88 per cent of Nitrogen, which, as has already been stated, corresponds with about $5\frac{1}{2}$ per cent of proteine compounds. When dried, and reduced to the state of meal, it cannot, like wheat flour, be manufactured into macaroni or vermicelli, or at least the macaroni made from it falls to powder when put into hot water. The fresh plantain, however, when boiled whole, forms a pretty dense firm mass of greater consistency and toughness than the potato. This mass, beaten in a mortar, constitutes the *foo-foo* of the negroes. The plantain meal cannot be got into this state unless by mixing it up with water to form a stiff dough, and then boiling it in shapes or bound in cloths. Plantain meal is prepared by stripping off the husk of the plantain, slicing the core, and drying it in the sun. When thoroughly dry, it is powdered and sifted. It is known among the creoles of the colony under the name of *Conquin-tay*. It has a fragrant odour, acquired in drying, somewhat resembling fresh hay or tea. It is largely employed as the food of infants and invalids. As food for children

and convalescents, it would probably be much esteemed in Europe, and it deserves a trial on account of its fragrance, and its being exceedingly easy of digestion. In respect of nutritiveness, it deserves a preference over all the pure starches on account of the proteine compounds it contains. The plantain meal would probably be best and freshest were the sliced and dried plantain cores exported, leaving the grinding and sifting to be done in Europe. The flavour of the meal depends a good deal on the rapidity with which the slices are dried; hence the operation is only fitted for dry weather, unless, indeed, when there was occasion for it, recourse were had to a kiln or stove. Above all, the plantain must not be allowed to approach too closely to yellowness or ripeness, otherwise it becomes impossible to dry it. The colour of the meal is injured when steel knives are used in husking or slicing, but silver or nickel blades do not injure the colour. On the large scale a machine, on the principle of the turnip slicing machine, would be employed. The husking could also be greatly facilitated by a very simple machine. Were the plantain meal to come into use in England, and bear a price in any way approaching to that of Bermuda arrowroot, it would become an extensive and very profitable export. Full-sized and well-filled bunches give 60 per cent of core to 40 of husk and top-stem, but in general it would be found that the core did not much exceed 50 per cent, and the fresh core will yield 40 per cent of dry meal, so that from 20 to 25 per cent of meal is obtained from the plantain; or 5lbs. from an average bunch of 25lbs.; and an acre of plantain walk of average quality, producing during the year 450 such bunches, would yield a ton and 10lbs. of meal, which, at the price of arrowroot, namely, 1s. per lb., would be a gross return of £112 10s. per acre. A new plantain walk would give twice as much. Even supposing the meal not to command over half the price of arrowroot, it would still form an excellent outlet for plantains whenever from any cause the price in the colony sank unusually low. Specimens have been transmitted from the Colonial Laboratory to some of the principal authorities on dietetics in England."

14. **MEAL from the BITTER CASSAVA.** Contributed by H. T. GARNETT.

(*Janipha Manihot*, H. B.) Baked into Bread. From Pltn. *Herstelling*, River Demerary. The following is taken from the Report of Dr. SHIER, above referred to, page 15:—"It may soon become an important question whether the plantain or some of the edible roots grown in the tropics, might not be sent to Europe in a fresh state as a substitute for the potato. Many of them, the buck yam and the cassava for instance, ought to be used when fresh dug; for every day they are out of the ground they deteriorate. This, however, is not so much the case with some of the larger yams. It is worth trying whether the finer sorts that deteriorate by keeping, might not, after being sliced and dried in the sun, become articles of export either in that state or when ground to meal. For this purpose the bitter cassava, the plantain, and the buck-yam are the most promising. Of the bitter cassava mention has already been made as a substance from which starch and *cassareep* might be prepared. In this case, however, the woody and cellular tissue, with the small quantity of starch left in it by the ordinary starch process, would form far too poor an article of diet to constitute part of the food of man. But the roots might be used as an article from which to prepare cassava meal, *cassareep*, and the very small quantity of starch which is expressed along with the juice, leaving all the rest of the starch to form part of the meal. It is of such meal that the cassava cakes of the Indians are prepared, and, although by no means so nutritious as Indian corn-meal,* there can be little doubt that in the Scotch

* I have determined the amount of nitrogen contained in the meal made from whole maize, the growth of the colony, as also from plantain-meal; I have also ascertained its amount in Cassava Meal, prepared in the man-

and Irish markets the cassava meal would obtain a preference; and were it exported in quantity it would probably come into extensive use among all classes. The process would be as follows:—After washing in a revolving apparatus, by which means the adherent earth would be got quit of, and almost the whole of the thin dark coloured cuticle would become detached, the roots would be reduced to pulp in a rasping-mill without the use of water; the pulp would be compressed in bags by hydraulic pressure, whereby the juice, together with a small portion of the starch, would be expressed. After allowing the starch to subside, the juice would be concentrated to about the density of 1·4. The starch would be washed, purified, and dried. The contents of the bags would then be broken up and dried in the sun or in a current of air, after which the meal would be sifted through a coarse sieve to separate the coarser parts, which, if their amount was considerable, could be ground and added to the rest. In this state of rough meal it is fit for making the cassava cakes.* If ground to flour it might be used to mix with wheat, rye, or barley flour. If an acre of well-tilled thorough-drained land, yield 10 tons of fresh roots, and I have every reason to believe that such a return might be obtained, I have ascertained that the produce would be $3\frac{1}{2}$ tons of meal, 593lbs. of *casareep*, and 2 cwt. of starch; and estimating the meal at 1d. per lb., the *casareep* at 1s. 5d. per lb., and the starch at 40s. per cwt., the gross amount would be 78l. 13s. 4d. per acre. In ascertaining these proportions, very simple machinery was employed, and had the pulp been better pressed the quantity of *casareep* would have been considerably greater. From the table given in a former note it will be seen, that the cassava meal prepared in this way contains but a very small proportion of matter nutritive, in the sense of contributing to the formation of blood, and that the expressed juice carries off fully one-half of the Proteine compounds contained in the plant. But cassava might be sliced, dried in the sun, and sent to Europe in that state. In this case it would be the sweet variety that would be employed. In dry weather the process succeeds remarkably well, and the dried slices keep well. I have ascertained that when these sliced and dried roots are first steeped and then boiled, they return to very nearly their original condition, and make an excellent substitute for the potato.

ner mentioned in the text, and in meal prepared from the Cassava sliced, dried, and ground without expressing the juice. Assuming LIEBIG's Formula of Proteine, namely, $\begin{Bmatrix} \text{C} & \text{N} & \text{H} & \text{O} \\ 48 & 6 & 36 & 4 \end{Bmatrix}$ the results stand thus:—

	Nitrogen.		Proteine Compounds.	
	Per cent.		Per cent.	
Maize-meal (unhusked)	1·73	.....	10·72	
Plantain-meal	·88	.....	5·45	
Cassava-meal (juice expressed).....	·36	.....	2·23	
Do. from the sliced and dried roots..	·78	.....	4·83	

* The process is usually conducted as follows:—The squeezed pulp is broken up, sifted, and exposed to the sun on trays or mats till it is fully more than half dry. An iron hoop of the size and thickness of the cake to be made is then laid on a girdle or hot plate, and the space within the hoop is filled evenly with the somewhat moist meal, no previous kneading or rolling having been employed. As soon as the coarse meal coheres, the ring is lifted and the cake is turned and heated on the opposite side. The heat should not be sufficient to brown the cake. The cakes are finally dried by exposure to the sun. From the dry Cassava meal, cakes may be prepared by sprinkling it with as much cold water as to moisten it to the proper point, and then proceeding as above. Hot water cannot be employed, neither can kneading nor any considerable degree of compression be used, otherwise the water does not evaporate readily enough, the starch gets too much altered by the heat, and the cake becomes tough.

15, 15a, 15b. **BANANAS.** Contributed by J. DE PUTRON.

(*Musa sapientum*, Lin.) Dried without the aid of fire. From Pltn. *Vigilance*, East Sea Coast Demerary. These specimens are sent in order to ascertain the likelihood of their standing the voyage, and becoming an article of export. They were prepared in the month of September, 1850. The following information regarding the Banana is extracted from the "Library of Entertaining Knowledge," volume, Timber, Trees, Fruits, page 366:—"Eight or nine months after the sucker has been planted, the Banana begins to form its clusters; and the fruit may be collected in the tenth or eleventh months. When the stock is cut, the fruit of which has ripened, a sprout is put forth, which again bears fruit in three months. The whole labour of cultivation which is required for a plantation of Bananas, is to cut the stalks laden with the ripe fruit, and to give the plants a slight nourishment once or twice a year by digging round the roots. A spot of a little more than a thousand square feet will contain from 30 to 40 Banana plants. A cluster of Bananas produced on a single plant often contains from 160 to 180 fruits, and weighs from 70 to 80lbs. But reckoning the weight of a cluster only at 40lbs., such a plantation would produce more than 4000lbs. of nutritive substance. HUMBOLDT calculates that as 33lbs. of Wheat and 99lbs. of Potatoes require the same space as that in which 4000lbs. of Bananas are grown, the produce of Bananas is consequently to that of Wheat as 133 to 1, and that of Potatoes as 44 to 1. The Banana ripened in the hot-houses of Europe has an insipid taste, but yet the natives of both Indies, to many millions of whom it supplies their principal food, eat it with avidity, and are satisfied with the nourishment it affords. This fruit is a very sugary substance; and in warm countries the natives find such food not only satisfying for the moment, but permanently nutritive. Yet weight for weight, the nutritive matter cannot at all be compared with that of Wheat, or even Potatoes. At the same time, a much greater number of individuals may be supported upon the produce of a piece of ground planted with Bananas, compared with a piece of the same size in Europe growing Wheat. HUMBOLDT estimates the proportion as 25 to 1; and he illustrates the fact by remarking that a European newly arrived in the torrid zone, is struck with nothing so much as the extreme smallness of the spots under cultivation round a cabin which contains a numerous family of Indians." It may be proper here to notice that the Banana is cultivated in this colony to a very limited extent, and used solely as a fruit in its ripe state. The Plantain, on the other hand, is extensively cultivated, and in its unripe state is the staple and favourite food of the Creole and African population of the colony.

16. **COFFEE.** Contributed by A. D. VANDER GON NETSCHER.

(*Coffea Arabica*, Lin.) From Pltn. *Klein Pouderoyen*, River Demerary.

16a. **PEARL COFFEE.** Contributed by JOHN KENNEDY.

From Pltn. *Nooit Gedacht*, Canal No. 1, River Demerary.

16b. **PEARL COFFEE.** Contributed by JOHN KENNEDY.

From Pltn. *Nooit Gedacht*, Canal No. 1, River Demerary.

17. **COFFEE.** Contributed by J. F. BEE.

In the husk. From Georgetown, Demerary.

18. **COFFEE.** Contributed by J. F. BEE.

From Georgetown, Demerary. The quantity of Coffee, the produce of British Guiana, returned for taxation in 1842, amounted to 1,214,010lbs. Dutch. The cultivation is now almost extinct. Nos. 16a and 16b are from one of the few Estates which have been and still continue to be cultivated solely as Coffee Plantations.

19. **C CAO or COCOA SEEDS.** Contributed by A. D. VANDER GON NETSCHER.
From Pltn. *Klein Pouderoyen*, River Demerary. Cacao, or Cocoa, (*Theobroma Cacao*, Lin.), was never extensively cultivated in this colony, although the soil and climate are well adapted for its production.
0. **SAOUARI NUTS.** Contributed by T. B. DUGGIN.
From River Berbice. Saouari Nuts (*Pekea tuberculosa*, Aubl., or *Caryocar tomentosum*, Dec.) The kernel of this nut is one of the most delicious fruits of the nut kind known. It abounds in the forests on the banks of the rivers of the colony.
- 0a. **MONKEY POT, SEED-VESSEL OF.** Contributed by J. OUTRIDGE.
From River Demerary. This very singular seed-vessel is the Pericarp of *Lecythis grandiflora*, Aubl. It contains a great number of oleaginous kernels, larger than Almonds, which are much esteemed by the Indians. The operculum has unfortunately been disfigured by the removal of its pointed apex, and by having been slightly grooved in attempting to secure it by a cord to the pericarp.
1. **CAPSICUMS, Dried Capsules of.** Contributed by DAVID SHIER.
From Pltn. *Kitty*, East Sea Coast Demerary. These Capsicums, known in the colony under the name of Buckramanni Peppers, are the most pungent and aromatic of the whole tribe. The seeds, which are inert, have been removed, and the dried Capsules are sent in the expectation of their being found to be a more piquant condiment than the article sold under the name of Cayenne Pepper.
- . **CAPSICUMS.** Contributed by DAVID SHIER.
Preserved in dilute acetic acid. From Pltn. *Kitty*, East Sea Coast Demerary.
- a. **CAPSICUMS.** Contributed by DAVID SHIER.
Preserved in dilute acetic acid. From Pltn. *Kitty*, East Sea Coast Demerary.
- b. **CAPSICUMS.** Contributed by DAVID SHIER.
Known as Yellow Bonnet Peppers, preserved in dilute acetic acid. From Pltn. *Kitty*, East Sea Coast Demerary.
- c. **CAPSICUMS.**
Known as Yellow Bonnet Peppers. Another specimen of the same.
3. **CAPSICUMS.** Contributed by DAVID SHIER.
Active principles of, extracted by Olive Oil. From Pltn. *Kitty*, East Sea Coast Demerary.
24. **CAPSICUMS.** Contributed by DAVID SHIER.
Active Principle of, extracted by Vinegar. From Pltn. *Kitty*, East Sea Coast Demerary.
25. **CAPSICUMS.** Contributed by J. S. STUTCHBURY.
Preserved in dilute acetic acid. From Georgetown, Demerary.
26. **BIRAMBI, FRUIT OF A SHRUB,** called. Contributed by T. B. DUGGIN.
Preserved in pickle. From the River Berbice. The fruit of this shrub makes a pickle, and a delicious preserve.
27. **LIMES.** Contributed by A. D. VANDER GON NETSCHER.
(*Citrus Lima*, Macfadyen.) Preserved in pickle. From Pltn. *Klein Pouderoyen*.

28. **KASAREEP.** Contributed by J. S. STUTCHBURY.

The inspissated juice of the Bitter Cassava. From Georgetown, Demerary.

29. **KASAREEP.** Contributed by J. F. BEE.

The inspissated juice of the Bitter Cassava. (*Janipha Manihot*, H. B.) From Georgetown, Demerary. Kasareep is much used as the basis of Sauces, and is used extensively in the colony in the preparation of Pepper-pot, &c. Dr. SHIER, in his Report above referred to, notices it as follows, page 12:—"To those who have never visited the tropics, it may be proper to notice that *casareep* is the concentrated juice of the roots of bitter Cassava, and the basis of the West Indian dish Pepper-pot. One of its most remarkable properties is its high antiseptic power, preserving any meat that may be boiled in it for a much longer period than can be done by any other culinary process. Casareep was originally a Buck or Indian preparation, and has often been described with more or less accuracy." It is well known that some of the Dutch planters of this colony have, by means of the addition of a small quantity of casareep, from time to time, to varieties of animal food, been enabled to keep up, in daily use, the *same* Pepper-pot for many years.

29a. **SALINE ASH.** Contributed by J. OUTRIDGE.

Used by the Indians as a substitute for Salt. From River Demerary. This Ash is obtained by burning certain plants growing on the rocks near the Rapids, about 1000 miles up the River Demerary. The Salt is extracted when required, by mixing water with the Ash, and, after the insoluble parts have subsided, pouring off the solution, and using it as Salt. A similar Saline ash is also said to be obtained by burning the Ita Palm.

30. **TURMERIC ROOT.** Contributed by J. S. STUTCHBURY.

Preserved in dilute acetic acid. From Georgetown, Demerary. The Turmeric (*Curcuma longa*, Lin.) grown in this colony is superior to any imported.

31. **ARROWROOT.** Contributed by H. T. GARNETT.

From Pltn. *Herstelling*, River Demerary. The produce of *Muranta arundinacea*, Lin.

32. **STARCH.** Contributed by H. T. GARNETT.

From the Bitter Cassava. From Pltn. *Herstelling*, River Demerary.

33. **STARCH.** Contributed by DAVID SHIER.

From the Sweet Cassava. (*Janipha Leoflingü*, H. B.) From Pltn. *Kitty* East Sea Coast Demerary.

34. **STARCH.** Contributed by DAVID SHIER.

From the Plantain. (*Musa paradisiaca*, Lin.) From Pltn. *Kitty*, East Sea Coast Demerary.

35. **STARCH.** Contributed by DAVID SHIER.

From Buck Yam. (*Dioscorea triphylla*, Lin.) From Pltn. *Kitty*, East Sea Coast Demerary. Persons desirous of obtaining further information regarding the Starches of this colony, and of their applicability to manufacturing and other purposes, are referred to the tabular results contained in the Report of Dr. SHIER, on the Starch producing plants of the colony above referred to, pp. 4 to 12.

36. **SUGAR, VACUUM PAN.** Contributed by GEORGE ANDERSON & Co.

From Pltn. *Ogle*, East Sea Coast Demerary. This sugar was manufactured as follows:—The cane juice was clarified by lime, and the coagulum separated by subsidence, by means of clay. The evaporation was con-

ducted in the ordinary way, and finished in the Vacuum Pan. This Sugar was washed by means of INNIS's Process.

37. **SUGAR, VACUUM PAN.** Contributed by JOHN JONES.

From Pltn. *Hope*, East Sea Coast Demerary. This Sugar was washed by means of INNIS's Process.

38. **SUGAR, VACUUM PAN.** Contributed by JOHN JONES.

From Pltn. *Hope*, East Sea Coast Demerary. This Sugar was cleaned by means of HARDMAN and FINZEL's Patent Centrifugal Machine.

39. **SUGAR, VACUUM PAN.** Contributed by J. S. STUTCHBURY.

From Pltn. *Enmore*, East Sea Coast Demerary. In the manufacture of this Sugar, the syrup was passed through animal charcoal, before being put into the Vacuum Pan.

40. **SUGAR.** Contributed by JAMES LAING.

From Pltn. *Friends*, River Berbice. Manufactured in GADSDEN and EVANS's Pan. This Sugar on being removed from the Pan was put into Cones, and, after the Molasses were drained off, was syruiped.

41. **SUGAR, MUSCOVADO.** Contributed by DAVID SHIER.

From the Colonial Laboratory, Georgetown, Demerary. This Muscovado was made according to the plan recommended by Dr. SHIER. Lime in slight excess was used in clarification. The coagulum was got rid of by subsidence. The excess of Lime was neutralised and the juice was concentrated on the open fire. No washing or syruiping had recourse to.

42. **MOLASSES.** Contributed by DAVID SHIER.

From the Colonial Laboratory, Georgetown, Demerary. This specimen of Molasses is from the Muscovado Sugar marked No. 41.

43. **SUGAR, MUSCOVADO.** Contributed by DAVID SHIER.

From the Colonial Laboratory, Georgetown, Demerary. This Muscovado was made by a modification of MELSEN's Process. No washing or syruiping was used.

44. **MOLASSES.** Contributed by DAVID SHIER.

From the Colonial Laboratory, Georgetown, Demerary. This specimen of Molasses is from the Muscovado Sugar marked No. 43.

45. **SUGAR, MUSCOVADO.** Contributed by J. S. STUTCHBURY.

From Pltn. *Fellowship*, Mahaicony, East Sea Coast Demerary. Manufactured by the ordinary process in use on estates in this colony.

Note.—All of the above-mentioned Sugars are the produce of the Otahite or Tahiti Cane (*Saccharum officinarum*, Lin.), the variety universally cultivated in this colony.

II. MATERIALS USED CHIEFLY IN THE CHEMICAL ARTS, OR IN MEDICINE.

46. **COPAIBA, BALSAM OF.** Contributed by J. S. STUTCHBURY.

From River Pomeroon, Essequibo. There are several trees in this colony supposed to yield the Balsam, not yet botanically determined.

47. **CAOUTCHOUC.** Contributed by J. OUTRIDGE.

From River Demerary, near the Falls. Taken from the India Rubber Tree by tapping, and formed into balls by the Indians, who climb the tree and, as the gum exudes, rub it on their bodies till it assumes a sufficient consistency to be formed into balls.

48. **MILK FROM THE COW TREE.** Contributed by J. OUTRIDGE.

From River Demerary. This fluid appears to contain Caoutchouc. It is

supposed to be obtained from *Tabernaemontana utilis*, Arnot, or a species of *Brosimum*.

49. **GUM RESIN.** Contributed by T. B. DUGGIN.

From the Simiri or Locust Tree. From River Berbice. This Gum is obtained by digging in the vicinity of the roots of the Tree (*Hymenaea Courbaril*, Lin.) from which it exudes in a vertical direction in columns or pieces upwards of a foot in length. It may also be obtained by tapping the tree, when in the course of a few days a large solid mass is formed. It is said to be the Gum Anime of commerce, and is occasionally used in this colony for the same purposes as Gum Copal. It may be obtained in great abundance in various parts of the colony.

50. **KARMAN.** Contributed by G. R. BONYUN.

From River Essequibo. Used by the Indians for waxing their nets and other purposes, and is said to be the inspissated juice of a tree called the Man or Mannee Tree.

51. **HYAWA GUM or INCENSE.** Contributed by J. OUTRIDGE.

From River Demerary. This Gum is very fragrant, and supposed to be suitable for pastilles and similar purposes. It is said to be obtained from the *Icica heptaphylla*, Aubl.

52. **LAUREL OIL.*** Contributed by J. S. STUTCHBURY.

From River Pomeroon, Essequibo. This Oil, supposed to be obtained from *Oreodaphne opifera*, Nees, is extensively used by the natives in affections of the joints. It is also an admirable solvent of India Rubber.

53. **CRAB OIL.** Contributed by J. S. STUTCHBURY.

From River Essequibo. This Oil is obtained from the seeds of the tree yielding Crabwood, *Xylocarpus Carapa*, Spr. or *Carapa Guianensis*, Aubl. It is used in the colony for burning, and is highly esteemed as a hair oil, preventing its turning grey, and curing scalp eruptions.

54. **DARI or DALI TREE, SEEDS OF.** Contributed by T. B. DUGGIN.

(*Viola sebifera*, Aubl.) From River Berbice. Candles are made from these seeds, said to be equal to wax. The tree abounds throughout the colony.

55. **SAND BOX TREE, SEEDS OF.** Contributed by DAVID SHIER.

Georgetown, Demerary. The seeds of *Hura crepitans*, Lin. They are a drastic purgative, and contain a very lipid oil.

55a. **LANA TREE, FRUIT OF.** Contributed by H. A. KOCH.

From River Berbice. This fruit is the produce of *Genipa Americana*, Lin., a tree very abundant in the colony, and produces the Lana Dye.

55b. **LANA DYE.** Contributed by H. A. KOCH.

From River Berbice. This Dye is the juice of the fruit of the *Genipa Americana*, Lin. The colour produced is a beautiful bluish black. The Indians use it in staining their faces and persons, and the effect lasts for several days.

55c. **INDIAN PAINT.** Contributed by J. OUTRIDGE.

From River Demerary. This pigment is prepared by mixing Arnotto, the red viscous pulp surrounding the seeds of the *Bixa Orellana*, Lin., with Crab Oil, the produce of the seed of *Carapa Guianensis*, Aubl. It is used by the Indians for decorating their persons and other purposes.

* Laurel Oil is sudorific, diuretic, aperient; useful in rheumatism, lues venera, and gout; imparts a peculiar odour to the perspiration and urine. Dose 20 — 30 to 50 — 60 twice daily.

56. **MORA TREE, BARK OF.** Contributed by T. B. DUGGIN.
From River Berbice. Bark of *Mora excelsa*, Benth., used as a tanning substance, and very plentiful.
57. **HOG PLUM TREE, BARK OF.** Contributed by T. B. DUGGIN.
From River Berbice. Bark of *Spondias lutea*, Lin. Used as a tanning substance, and very abundant.
58. **COURIDA TREE, BARK OF.** Contributed by DAVID SHIER.
From Pltn. Kitty, East Sea Coast Demerary. Bark of *Avicennia nitida*, Lin. Used as a tanning substance, and extremely abundant on the sea coast.
59. **HY-ARI, or HAI-ARI.** Contributed by J. S. STUTCHBURY.
Fish Poison. From River Demerary. Stem of *Lonchocarpus Nicon*, Dec. Used by the natives to intoxicate fish for the purpose of capturing them.
- 59a. **YARRIMARA, FRUIT OF.** Contributed by H. A. KOCH.
From River Berbice. This is stated by the contributor (Dr. KOCH) to be the fruit of a vine found in the interior of the colony, and which he claims the merit of having discovered to be the chief ingredient of the celebrated Wourali poison.
60. **ANGOSTURA BARK.** Contributed by J. S. STUTCHBURY.
From River Pomeroon, Essequibo. Supposed to be obtained from *Galipea Cusparia*. St. Hil. or *G. officinalis*, Hanc. Used as a febrifuge.
61. **RHIZOPHORA or MANGROVE BARK.** Contributed by J. S. STUTCHBURY.
From East Sea Coast Demerary. Bark of *Rhizophora racemosa*, Meyer. Ascertained to be a very valuable remedy in cases of chylous urine.
62. **TRYSLÉ BARK.** Contributed by J. OUTRIDGE.
River Demerary. Used as an emetic by the Indians.
63. **GREENHEART TREE, BARK OF.** Contributed by J. S. STUTCHBURY.
From River Demerary. Bark of *Nectandra Rodiaei*, Benth. Yields the alkaloid known as Bibirine, a febrifuge.
64. **GEEENHEART TREE, SEEDS OF.** Contributed by T. B. DUGGIN.
From River Berbice. Used as a tonic and febrifuge. Occasionally, in times of scarcity, these seeds are grated and mixed with decayed wallaba (the wood of *Eperua falcata*, Aubl.), and used by the Indians as food.
65. **GUINEA PEPPER or GRAINS OF PARADISE.** Contributed by J. S. STUTCHBURY.
From River Demerary. Seeds of *Anomum Melegueta*, Roxb. These seeds are much superior to those imported from Africa.
66. **ALPINIA or SHELL PLANT, SEEDS OF.** Contributed by J. S. STUTCHBURY.
From River Demerary. These seeds (*Alpinia nutans*, Rosc.) resemble, and in some respects possess, the properties of Cardamoms.
67. **PHYSIC NUTS, SEEDS OF.** Contributed by DAVID SHIER.
Georgetown, Demerary.
68. **PHYSIC NUTS, SEEDS OF.** Contributed by E. A. MANGET.
Georgetown, Demerary. These Physic Nuts are the produce of different trees, but are possessed of similar emetic and purgative properties, and are frequently used as a domestic medicine by the black population of the colony.

69. **QUASSIA BITTER.** Contributed by Mrs. ARRINDELL.

From Pltn. *Zeelandia*, Wakenaam, River Essequibo. This is the produce of *Quassia amara*, Lin. It is distinct from the Quassia of the shops, and is extensively and successfully used in the colony as a tonic and febrifuge. It is very abundant.

70. **BOEIARI, BUSH ROPE.** Contributed by J. S. STUTCHBURY.

From River Demerary. This Bush Rope is plentiful in the interior of the colony, and is a favourite remedy of the Indians in pectoral complaints. It is exceedingly aromatic and forms an excellent ingredient in stomachic bitters.

III. MATERIALS FOR BUILDING, CLOTHING, ETC.

71. **COTTON, Cleaned.** Contributed by DANIEL BLAIR.

From Pltn. *Batavier*, Mahaica River.

72. **COTTON, Uncleaned.** Contributed by DANIEL BLAIR.

From Pltn. *Batavier*, Mahaica River. These specimens were obtained from wild or self-sown plants, the remains of the Cotton cultivation on Pltn. *Batavier*, which was abandoned about 25 years ago.

73. **COTTON, Uncleaned.** Contributed by A. D. VANDER GON NETSCHER.

From Pltn. *Klein Pouderoyen*, River Demerary.

74. **COTTON, Hard Seed, Cleaned.** Contributed by J. F. BEE.

From Pltn. *Woodlands*, River Mahaica, Demerary.

74a. **COTTON, Mexican White Seed.** Contributed by P. HUGHES.

From Pltn. *Anna Regina*, Essequibo.

74b. **COTTON, Large Green Seed, "Buck."** Native. Contributed by P. HUGHES.

From Pltn. *Anna Regina*, Essequibo.

74c. **COTTON, Small Green Seed, "Buck."** Native. Contributed by P. HUGHES.

From Pltn. *Anna Regina*, Essequibo.

74d. **COTTON, Large Kidney.** Contributed by P. HUGHES.

From Pltn. *Anna Regina*, Essequibo.

74e. **COTTON, Small Kidney.** Contributed by P. HUGHES.

From Pltn. *Anna Regina*, Essequibo.

74f. **COTTON, Loose Black Seed.** Contributed by P. HUGHES.

From Pltn. *Anna Regina*, Essequibo.

75. **COTTON, Loose Seed, Cleaned.** Contributed by J. F. BEE.

From Pltn. *Woodlands*, River Mahaica.

76. **COTTON, Loose Seed, Uncleaned.** Contributed by J. F. BEE.

From Pltn. *Woodlands*, River Mahaica, Demerary.

The above specimens of Cotton are the produce of *Gossypium arboreum*, Lin., and other arborescent species. Sir ROBERT SCHOMBURGK, in his description of British Guiana, makes the following observations on the subject of the cultivation of Cotton, page 103: - "The indigenous Cottons are very numerous, and the Indian has generally a few shrubs of that useful plant around his hut. However, I have seen the industrious Macusi cultivating it more extensively. The Hammocks which the Indians manufacture of it are valued for their strength and durability, and are considered superior to the European article. Like the staples before enumerated, Cotton has been only cultivated by the colonists at the coast regions; but

its cultivation has, in a great measure, been abandoned, because our Cottons, raised by free labour, and in a British colony, were undersold by those produced by slavery in the United States. If, with regard to the abundance and cheapness of labour, British Guiana were put on the same footing as the Slave States in America, an inexhaustible supply of Cotton of every description might be produced. There is no doubt that all kinds of Cotton from the best long staple down to the finest short staple, might be cultivated in the colony, as the kind which does not thrive on one soil or climate might be produced in another. An extent of sea-coast of 280 miles from the River Corentyne to the mouth of the Orinoko, would produce Cotton vying with the best in the world. I doubt the opinion that the finest Cotton will not grow at a greater distance than 20 miles from the sea. I have sent samples of the wild Cotton from the interior to the colony which were admired by competent judges for their fine long staple and silky appearance. No care whatever had been bestowed upon the cultivation of these plants which grew at a distance of 300 or 400 miles from the coast. Although the growth of the plant was not luxuriant, it was covered abundantly with Cotton of the most excellent quality; indeed, it would be highly advisable to the Cotton growers at the coast to exchange the seeds."

- 76a. **SILK COTTON.** Contributed by E. C. ROSS.

From Georgetown, Demerary.

- 76b. **SILK COTTON, BALE OF.** Contributed by E. C. ROSS.

From Georgetown, Demerary. Obtained from the seed vessels of the silk Cotton tree (*Bombax Ceiba, Lin.*) It has been exported to the United States, and used in the manufacture of hats.

77. **PLANTAIN FIBRE.** Contributed by W. DAVISON.

From Pltn. *Vigilance*, East Sea Coast Demerary.

78. **PLANTAIN FIBRE.** Contributed by A. D. VANDER GON NETSCHER.

From Pltn. *Klein Pouderoeyn*, River Demerary. This fibre is produced from the stems of Plantain and Banana Trees, (*Musa paradisiaca* and *sapientum*,) and might be obtained in very large quantities from the Plantain cultivation of the colony. It is calculated that upwards of 600 lbs. weight of fibre might be produced annually from each acre of Plantains, after reaping the fruit crops. At present, the stems of the Plantain Trees, when cut down, are allowed to rot on the ground. If a remunerative price could be realized for this fibre, a new branch of industry would be opened up to the colonists.

Note.—In addition to the above-mentioned specimens, a barrel of the fibre, contributed by W. DAVISON, has been sent for experimental purposes. It may be proper to mention, that in 1846 a gentleman visited this colony, and exhibited several specimens of cloth of a beautiful silky texture, and specimens of paper of superior quality, manufactured from the fibre of Plantains grown in the Jardin des Plants.

79. **SILK GRASS FIBRE.** Contributed by J. DE PUTRON.

From Pltn. *Vigilance*, East Sea Coast Demerary. This fibre is obtained from *Agave vivipara, Lin.*

80. **SILK GRASS FIBRE.** Contributed by T. B. DUGGIN.

From River Berbice. This fibre is obtained from a species of *Bromelia*. It is very strong, and is used by the Indians to make bowstrings, nets, cordage, &c.

81. **TIBISIRI FIBRE.** Contributed by T. B. DUGGIN.

From River Berbice. This fibre is derived from the Ita Palm (*Mauritia*

flexuosa, Lin.) It is used by the Indians for making hammocks, cordage, &c.

82. MOHOE, FIBRE OF. Contributed by J. F. BEE.

From River Demerary. Obtained from a tree of the Mallow tribe. (*Thespesia popalnea*, Correa, or *Hibiscus elatus*, Swartz?) It is very strong, and used for making cordage, coffee-bags, &c.

83. TABLE TOP.

Exhibiting 84 specimens of woods, the growth of the colony, viz.:—

1. Sand Mora	29. Siridani	58. Washiba
2. Lana [young]	30. Hooboballi	59. Kimaasamasa
3. Itikiribouraballi,	31. Bannia	60. Curbacalli
4. Kretti or Bastard	32. Hyawaballi	61. Bartaballi
Silverballi	33. Tatabo	62. Acouri broot
5. Kurara	34. Masaranuni	63. Wara couri
6. Kakaralli	35. Cabacalli	64. Ducalli
7. Brown Silverballi	36. Pritti	65. Arawica
8. Yellow ditto	37. Canuballi	66. Bangeo or Ebony
9. Youraballi	38. Mora	67. Hackia
10. Saouari	39. Letterwood	68. Kurahara
11. Crabwood	40. Kucahara	69. Calabash
12. Yerara	41. Wamara	70. Kuracurara
13. Purpleheart	42. Kamakasa	71. Towraneroo
14. Simaruba	43. Hiaballi	72. Greenheart
15. Gomarrow	44. Determa	73. Hya-hya
16. White Cedar	45. Wadaduri	74. Cabbage tree
17. Locust	46. Rosewood	75. Wallaba
18. Coutaballi	47. Saka	76. Yarri Yarri
19. Caraharri	48. Keria	77. Waremia
20. Huwassi	49. Kamacusack	78. Hooboballi
21. Armiosi	50. Red Cedar	79. Cannella
22. Suradanni	51. Wild Orange	80. Itikiribouraballi, old
23. Assepoca	52. Guava	81. Bully tree
24. Akaraki	53. Logwood	82. Silberdani
25. Hymakusi	54. Tabiecushi	83. Light Brown Silverballi
26. Ducalaballi	55. Coffee	84. Kofassa.
27. Turiballi	56. Murwaana	
28. Waiki	57. Kartaballi	

It will be seen from this table that British Guiana produces many Woods highly ornamental and useful for cabinet-making and upholstery.

84. MORA. Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

84a. MORA. Contributed by J. OUTRIDGE.

Vertical Section. From River Demerary. The tree (*Mora excelsa*, Benth.) producing this wood frequently reaches a height of upwards of 100 feet. It grows abundantly on barren sand reefs. It is tough, close and cross-grained, and is peculiarly adapted for ships' timbers and planks, for which purpose it is extensively used. The trunk of this tree, when of the height of from 40 to 50 feet, will square from 18 to 20 inches, but when grown to that size it is generally faulty. The specimens sent are from a tree supposed to be from 30 to 40 years old.

85. GREENHEART. Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

- 85a. **GREENHEART.** Contributed by J. S. STUTCHBURY.

Vertical section. From River Demerary. The Greenheart tree (*Nectandra Rodioei*, Benth.) is very abundant, and its timbers, squaring from 18 to 24 inches, can be procured without a knot from 60 to 70 feet long. It is a fine grained hard wood, well adapted for the planking of vessels, house frames, wharves, bridges, and other purposes, where great strength and durability are required. Mr. MANIFOLD, engineer of the Demerary Railway, states that this is the best timber for resisting tensile and compressive strains, and is therefore well adapted for kelsons for ships, and beams of all kinds.

- 85b. **BLACK GREENHEART.** Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

- 85c. **BLACK GREENHEART.** Contributed by J. OUTRIDGE.

Vertical section. From River Demerary. The timber of this tree is used for ship building, planks, &c., and is considered more durable than the common Greenheart. The specimens sent are from a tree supposed to be about 50 years old.

86. **PURPLEHEART.** Contributed by A. BUCHANAN.

Transverse section. From River Essequibo.

- 86a. **PURPLEHEART.** Contributed by A. BUCHANAN.

Vertical section. From River Essequibo. The Purpleheart (*Copaifera pubiflora* or *bracteata*?) yields a timber possessing great strength, durability, and elasticity, and is described by LINDLEY as "invaluable for resisting the shock of artillery discharges, on which account it is employed for mortar beds." It is used for windmill shafts, rollers, and machinery.

87. **KAKARALLI.** Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

- 87a. **KAKARALLI.** Contributed by J. OUTRIDGE.

Vertical section. From River Demerary. This wood is very plentiful, and it has been proved that it is more durable than Greenheart in salt-water, as it possesses the quality of resisting the depredations of the sea worm and barnacle. It may be had from 6 to 14 inches square. The specimens sent are from a tree supposed to be about 20 years old.

88. **WAMARA, or BROWN EBONY.** Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

- 88a. **WAMARA, or BROWN EBONY.** Contributed by J. OUTRIDGE.

Vertical section. From River Demerary. This wood is hard and cross-grained, consequently not apt to split; it would therefore answer various purposes in naval architecture. It may be had from 6 to 12 inches square, and from 40 to 60 feet long. The Indians make war clubs of it. The specimens sent are from a tree supposed to be about 20 years old.

89. **HOOBOBALLI.** Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

- 89a. **HOOBOBALLI.** Contributed by J. OUTRIDGE.

Vertical section. From River Demerary. This wood is very close and fine grained, is easily worked, takes a high polish, and is much used in the colony for furniture. It may be had from 15 to 20 inches square, 40 to 70 feet long. The specimens sent are from a tree supposed to be about 20 years old.

90. **WALLABA.** Contributed by A. BUCHANAN.

Transverse section. From River Essequibo.

- 90a. **WALLABA.** Contributed by A. BUCHANAN.

Vertical section. From River Essequibo. This wood is produced from *Eperua falcata*, Aubl., a tree very abundant throughout the colony. It is hard, splits freely, and is very durable from being impregnated with a resinous oil. It is used for house frames, palings, shingles, staves, &c. It has been ascertained that a roof well shingled with this wood, will last upwards of 40 years. It may be had from 15 to 20 inches square, from 30 to 40 feet long.

- 90b. **WALLABA, TACOUBA or HEART OF.** Contributed by T. B. DUGGIN.

From River Berbice. This wood is the heart of the upper portion of the trunks of Wallaba Trees which have been felled in the forests, and from which the sap wood has decayed. These are much used as paling posts and for other outdoor purposes, being found to be so durable as to be almost imperishable. They are about to be used as sleepers on the Demerary Railway, for which purpose it is supposed they will prove to be peculiarly well adapted. The defect of Wallaba and of its Tacouba is its inability to bear great lateral strain. It therefore should not be used for beams longer than 12 feet.

91. **BULLY TREE.** Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

- 91a. **BULLY TREE.** Contributed by J. OUTRIDGE.

Vertical section. From River Demerary. The tree yielding this wood is supposed to be a species of *Minusops*. It is found throughout the colony, but most abundantly in the County of Berbice. It is of great size, and squares from 20 to 30 inches, and may be obtained from 20 to 30 feet long. The weather has little effect upon it, and it is employed for house-frames, posts, floors, &c. The upper portion of the trunk and branches are manufactured into shingles, wheel-spokes, palings, &c.

92. **SILVERBALLI, YELLOW.** Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

- 92a. **SILVERBALLI, YELLOW.** Contributed by J. OUTRIDGE.

Vertical section. From River Demerary. This Wood is supposed to be derived from a species of *Nectandra*. It is light and floats, and contains a bitter principle, which protects it from the attacks of worms. Hence it is much used for the outside planking of colony craft. It is also used for booms and masts. It grows to a great size, but then is often hollow. It will, however, square sound from 10 to 14 inches, from 40 to 50 feet long.

93. **SILVERBALLI, BROWN.** Contributed by T. FAUSET.

Portion of the planking of a drogher. This specimen formed part of the outside planking of a drogher employed in the conveyance of produce in this colony, and is known to have been exposed to the action of salt water during a period of 20 years.

94. **SILVERBALLI, BROWN.** Contributed by T. FAUSET.

Portion of the planking of a punt. This specimen formed part of the bottom of a punt, known to have been used in the Demerary River for a period of 30 years and upwards.

95. **CAMARA.** Contributed by A. BUCHANAN.

Transverse section. From River Essequibo.

- 95a. **CAMARA.** Contributed by A. BUCHANAN.

Vertical section. From River Essequibo. This wood is obtained from

Dipteryx odorata, Willd.: the tree which produces the well-known Tonkin Bean. It is hard, tough, and durable in an eminent degree, and it is said that a portion of its timber, one inch square, and of a given length, bears 100 lbs. more weight than any other timber in Guiana of the same dimensions. It is therefore peculiarly well adapted for any purpose where resistance to great pressure is the object, and for shafts, mill wheels, or cogs. It will square from 18 to 20 inches, from 40 to 50 feet long. This tree is, however, not very plentiful in this colony.

96. SAOUARI. Contributed by A. BUCHANAN.

Transverse section. From River Essequibo.

96a. SAOUARI. Contributed by A. BUCHANAN.

Vertical section. From River Essequibo. This wood is obtained from *Caryocar tamentosum*, Dec., or *Pekea tuberculosa*, Aubl.; the tree which yields the delicious nut known as the Saouari or Sewarri Nut. It greatly resembles in its properties the Mora, being excellent for ship-building, mill-timbers, and plank, and may be had from 16 to 20 inches square, from 20 to 40 feet long.

97. YARURI or PADDLE WOOD. Contributed by J. OUTRIDGE.

Vertical section. From River Demerary.

97a. YARURI or PADDLE WOOD. Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

97b. YARURI or PADDLE WOOD. Contributed by J. OUTRIDGE.

Transverse section. From River Demerary. This wood is obtained from *Aspidosperma excelsum*, Benth. The whole tree, from 5 to 6 feet in diameter, and, to the first branches, about 50 feet in height, has the appearance of being fluted, or as if it consisted of a fasciculus of numerous slender trees. The fluted projections of the trunk are used by the Indians for the construction of their paddles. The wood is light, elastic, and very strong, and preferred to any other for Cotton Gin-Rollers.

98. HACKIA or LIGNUM VITÆ. Contributed by J. OUTRIDGE.

Transverse section. From River Demerary.

98a. HACKIA or LIGNUM VITÆ. Contributed by J. OUTRIDGE.

Vertical section. From River Demerary. This wood, known in the colony as *Lignum vitæ*, is said to be obtained from *Guaicum officinale*, Lin.; but this seems doubtful, as the tree producing the wood attains a height of from 50 to 60 feet, and squares 16 to 18 inches, whilst the *Guaicum officinale* is described as a comparatively small tree, about 4 or 5 inches in diameter. It is used for mill-cogs and shafts. The specimens sent are from a tree supposed to be about 40 years old.

99. LANA. Contributed by T. B. DUGGIN.

Transverse section. From River Berbice.

99a. LANA. Contributed by T. B. DUGGIN.

Vertical section. From River Berbice. This wood is obtained from *Genipa Americana*, Lin.; the fruit of which yields the Indian pigment known as Lana Dye. The tree is very high, and the trunk will frequently square from 14 to 18 inches. The wood is close grained, and is not liable to split.

100. MAMMEE APPLE TREE. Contributed by T. B. DUGGIN.

Transverse section. From River Berbice.

- 100a. **MAMMEE APPLE TREE.** Contributed by T. B. DUGGIN.
Vertical section. From River Berbice. This wood is obtained from the *Mammea mericana*, Lin., which produces a Mammee Apple, or Wild Apricot of South America.
101. **HYAWA.** Contributed by T. B. DUGGIN.
Transverse section. From River Berbice.
- 101a. **HYAWA.** Contributed by T. B. DUGGIN.
Vertical section. From River Berbice. This wood is obtained from the *Icica heptaphylla*, Aubl., or Incense Tree, yielding the gum Hyawa.
102. **CORKWOOD TREE.** Contributed by T. B. DUGGIN.
Transverse section. From River Berbice.
- 102a. **CORKWOOD TREE.** Contributed by T. B. DUGGIN.
Vertical section. From River Berbice.
- 102b. **CORKWOOD TREE.** Contributed by GEORGE PONTIFEX.
Abutment from near the root. From Troolie Island, River Essequibo. This wood is supposed to be obtained from *Pterocarpus Draco*, Lin., or *P. suberosus*, Pers., and is used chiefly as floats for fishing nets.
103. **COURIDA.** Contributed by J. F. BEE.
Transverse section. From Pltn. Woodlands, River Mahaica.
- 103a. **COURIDA.** Contributed by J. F. BEE.
Vertical section. From Pltn. Woodlands. River Mahaica. This wood is obtained from *Avicennia nitida*, Jac.,—a tree of surprising rapidity of growth. These specimens are from a tree five years old. The wood is perishable when exposed to the atmosphere, but is very durable under ground, and is therefore used as foundations for buildings.
104. **ITIKIRIBOURABALLI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 104a. **ITIKIRIBOURABALLI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This wood is supposed to be obtained from *Macharium Schomburghii*, Benth. The trunk grows to the length of from 30 to 40 feet, and squares from 12 to 16 inches. It is used chiefly for cabinet work.
105. **WHITE CEDAR or WARRACOORI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 105a. **WHITE CEDAR or WARRACOORI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary.
- 105b. **WHITE CEDAR or WARRACOORI.** Contributed by J. F. BEE.
Transverse section. From River Mahaica, East Sea Coast, Demerary.
- 105c. **WHITE CEDAR or WARRACOORI.** Contributed by J. F. BEE.
Vertical section. From River Mahaica, East Sea Coast, Demerary. This wood is obtained from *Icica-altissima*, Aubl. It is light, easily worked, and very aromatic. Sir ROBERT SCHOMBURGK states that one of his canoes, 42 feet long, and 5½ feet wide, was made from a tree of this species. It is used for oars and paddles, and for boards for inside work of houses. During the American war it was used for staves of sugar hogsheds.
106. **SURADANNI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.

- 106a. **SURADANNI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. It is much used for timbers, rails, and covering boards for colony craft, and for naves and felloes of wheels. It is also made into canoes by the Indians. It will square from 14 to 18 inches, from 30 to 40 feet long.
107. **DETERMA.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 107a. **DETERMA.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This wood is used for masts, booms, and planking for colony craft; and as insects do not infest it, it is well adapted for chests, wardrobes, &c. It will square from 14 to 16 inches, from 40 to 60 feet in length.
108. **CRABWOOD.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 108a. **CRABWOOD.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This wood is obtained from *Xylocarpus Curapa*, Spreng., or *Curapa Guianensis*, Aubl.,—the seeds of which yield the Crab Oil. It is a light wood, and takes a high polish, and is used for masts and spars, flooring, partitions, and doors of houses. There are two varieties, the red and white. These specimens are the white. It squares from 14 to 16 inches, from 40 to 60 feet long.
109. **KOQUERETTEBALLI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 109a. **KOQUERETTEBALLI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This wood forms excellent rafters and beams for cottages. It grows from 20 to 30 feet long, and from 4 to 6 inches in diameter.
110. **COUTABALLI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 110a. **COUTABALLI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. The tree which yields this timber grows upon sand hills; the wood is very hard and durable if not exposed to the weather; it is plentiful, and principally used for house frames, and will square 12 inches, from 30 to 40 feet long.
111. **BLACKHEART.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 111a. **BLACKHEART.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This is a good wood for house frames, and for making furniture. It will square from 6 to 7 inches, from 20 to 30 feet long.
112. **CABACALLI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 112a. **CABACALLI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This wood is impregnated with a bitter principle, which defends it against worms; it lasts well under water, and is much used for planking colony craft. It must, however, be fastened with copper nails. It will square from 12 to 16 inches, or even more, from 40 to 45 feet long.

113. **YARRI-YARRI, or LANCEWOOD.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 113a. **YARRI-YARRI, or LANCEWOOD.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This tree is stated by SCHOMBURGK to be *Duguetia quitarensis*, Lindl., a slender tree found in tolerable abundance in the interior of the colony. The wood possesses much toughness and elasticity, and is used for gig shafts, and, when small, for whip handles and fishing rods. The Indians make their arrow points of it. It grows from 4 to 6 inches in diameter at the lower end, and from 15 to 20 feet long.
114. **TORCHWOOD.** Contributed by J. OUTRIDGE.
From River Demerary. Supposed to be obtained from a species of *Amyris* or *Icica*. When beaten, so as to separate the fibre, the branches are used as torches by the Indians.
115. **TOOROO.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 115a. **TOOROO.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This tree is a species of Palm. It grows to the height of from 50 to 70 feet. Its woody outside is used by the cabinet makers for inlaid work, walking sticks, billiard cues, &c.
116. **COFFEE TREE.** Contributed by J. F. BEE.
Portion of Trunk. From Canal No. 2, River Demerary.
- 116a. **COFFEE TREE.** Contributed by J. F. BEE.
Vertical section. From Canal No. 2, River Demerary.
117. **TIGERWOOD.** Contributed by J. F. BEE.
Transverse section. From River Demerary.
- 117a. **TIGERWOOD.** Contributed by J. F. BEE.
Vertical section. From River Demerary. This is the heart of the wood Itikiribouraballi, and is a valuable wood for cabinet making.
- 117b. **LETTERWOOD.** Contributed by J. S. STUTCHBURY.
Transverse section. From River Corentyne.
- 117c. **LETTERWOOD.** Contributed by J. S. STUTCHBURY.
Vertical section. From River Corentyne. This is obtained from *Brosimum Aubletii*, Poep, or *Piratinera guianensis*, Aubl., and is one of the costliest woods which Guiana possesses. It is of a beautiful brown colour with black spots, which have been compared to hieroglyphics; the spotted part being only peculiar to the heart, which is seldom more than 12 to 15 inches in circumference. It is adapted for cabinet work of small size and for veneering only. From its extreme hardness it is difficult to work, and therefore little used.
- 117d. **SAKA, or BASTARD PURPLE HEART.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 117e. **SAKA, or BASTARD PURPLE HEART.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. Used for furniture.
- 117f. **ITABALLI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.

- 117g. **ITABALLI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. The tree which produces this wood is *Vochysia Guianensis*, Aubl., and is used by the Indians for making Corials.
- 117h. **WADADURI, or MONKEY POT TREE.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 117i. **WADADURI, or MONKEY POT TREE.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. The tree which produces this timber is the *Lecythis grandiflora*, Aubl., and is plentiful. The wood is used for furniture, staves, &c. The specimens sent are from a tree supposed to be about 25 years old.
- 117j. **HYAWABALLI.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 117k. **HYAWABALLI.** Contributed by J. OUTRIDGE.
Vertical section. From River Demerary. This tree is scarce. This wood, known as Zebra Wood, is used for furniture. The specimens sent are from a tree supposed to be about 30 years old.
- 117l. **SILBADANI.** Contributed by J. OUTRIDGE.
Transverse section. From the River Demerary.
- 117m. **SILBADANI.** Contributed by J. OUTRIDGE.
Vertical section. From the River Demerary. This wood is used for furniture. The specimens sent are from a tree supposed to be about 20 years old.
- 117n. **SIMIRI, or LOCUST TREE.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 117o. **SIMIRI, or LOCUST TREE.** Contributed by J. OUTRIDGE.
Vertical section. From the River Demerary. The tree producing this wood is *Hymenaea Courberil*, Lin., and is plentiful in various parts of the colony. It often attains a height of from 60 to 80 feet, with a trunk from 7 to 8 feet in diameter. The wood is hard and compact, and its durability recommends it for mill rollers and similar purposes. The Indians make "Woodskins" out of the bark. The specimens sent are from a tree supposed to be about 100 years old.
- 117p. **TOWRANEROO, or BASTARD BULLY TREE.** Contributed by J. OUTRIDGE.
Transverse section. From River Demerary.
- 117q. **TOWRANEROO, or BASTARD BULLY TREE.** Contributed by J. OUTRIDGE.
Vertical section. From the River Demerary. It is very plentiful, and is used for framing timber, spokes, &c. It will square 2 inches, from 40 to 50 feet long. The specimens sent are from a tree supposed to be about 50 years old.
- 117r. **MARISIBALLI.** Contributed by J. OUTRIDGE.
Transverse section. From the River Demerary.
- 117s. **MARISIBALLI.** Contributed by J. OUTRIDGE.
Vertical section. From the River Demerary. This tree is plentiful, and is used chiefly for spars. It will square from 13 to 14 inches, from 30 to 40 feet in length. The specimens sent are from a tree supposed to be about 20 years old.

With regard to the Timber Trees of this Colony, Sir ROBERT SCHOMBURCK, in his description of British Guiana, published in 1840, p. 116, observes :—"I cannot conclude my observations on the capabilities of British Guiana, without referring once more to the importance of its timber trade, and the source of wealth which might be derived if there were a sufficient number of woodcutters. At present, if we make a few exceptions, it is only carried on by individuals who enter upon it with but little capital and slender means; and yet there are instances where the industrious and sober have reaped riches. The fitness of the timbers for Naval architecture is unparalleled, and in some instances is said to surpass the teak. The green-heart, the mora, and souari or sewarri, of all other woods, are most unquestionably the best adapted for ship-building. Within the last ten or twelve years a considerable quantity of brown greenheart has been sent to Liverpool and Greenock; and I have been told that builders and others interested in shipping are now of opinion, after about ten years' trial of the wood, that in strength and durability it is superior to any oak, and it actually commands a higher price. Had these woods been introduced and extensively employed in the Royal Dock-yards fifteen or twenty years ago, it is the opinion of competent judges that we should not now hear much of dry-rot and Kyan's patent; and, not to mention that rapid decay of vessels built of English and African Oak, and the consequent frequent repairs, with what saving to government would it not have been connected? If, therefore, the attention of the Navy Board could be drawn to the important fact that British Guiana can furnish the finest and most durable wood in the world, in sufficient quantities to supply all the ship-building establishments in Great Britain, a double benefit would arise from it, namely, the saving to Government and the increased demand for the natural productions of the colony. The first experiment might be made to establish a dock-yard for the repair of such of her Majesty's Cruisers on the West India station as draw not more than 18 or 19 feet water. The outlay of such an establishment would be trifling, if the importance of ultimate success be considered. The woods, which are qualified for ornamental purposes, vie in elegance, if polished, with any in the world. The want of labourers is the great cause that these treasures lie comparatively hidden, and have scarcely excited attention. The demand in the colony has been so great for native woods, that those who are present employed in that trade are not able to meet it." It may be proper to add to this statement from Sir ROBERT SCHOMBURCK's work, the fact, that in consequence of British Guiana being so extensively intersected by navigable rivers, ships of considerable burden may load in the immediate vicinity of most of the wood-cutting establishments.

4. MISCELLANEOUS ARTICLES.

118. **TONKIN BEAN.** Contributed by J. S. STUTCHBURY.

From River Demerary.

- 119a. **TONKIN BEAN** in Capsule. Contributed by J. S. STUTCHBURY.

From River Demerary. This bean is the fruit of *Dypteryx odorata*, Willd., and is principally used to impart fragrance to snuff.

119. **JOB'S TEARS.** Contributed by T. B. DUGGIN.

From River Berbice. This very peculiar seed of a grass is the fruit of *Coix Lachryma*, Lin., and is used in Guiana for ornaments, such as necklaces, &c.

120. **SOAP BERRIES.** Contributed by GEORGE ROSS.

From Pltn. *Ruinveld*, River Demerary. This is the kernel of the fruit of *Sapindus Saponaria*, Lin., and is used for ornaments, necklaces, bracelets, &c.

121. **BARRICARRI, SEEDS** called. Contributed by Mrs. MANGET.
From Georgetown, Demerary. These are the seeds of *Erythrina Corallo-*
dendron, *Lin.*, and are used for ornamental purposes.
122. **BUCK SHOT, or SEEDS OF CANNA.** Contributed by DAVID SHIER.
From Georgetown, Demerary. This is the seed of an undetermined species
of *Canna*, variously supposed to be *C. coccinia*, *C. lutea*, *C. occidentalis*, and
C. Ochiras, and is used by the Indians for shot. From the rhizome of this
plant is obtained the Tous-les-Mois Starch of Commerce. It grows wild
in this colony, and could be cultivated to any extent.

(C.) ANIMAL KINGDOM.

123. **ISINGLASS.** Contributed by MORISON and KNOX.
From the Gilbagre or Gilbacker. This is the sound of the *Silurus* — ?
a fish very abundant in the estuaries of the rivers of this colony.
124. **HONEY.** Contributed by J. F. BEE.
From Pltn. Woodlands, River Mahaica. This is the produce of a small
wild bee, which is stingless, and easily domesticated. The honey is de-
posited in small separate pouches, and may be removed once every month
by making a puncture in the bottom of the pouch, from which it readily
flows,—which opening, the insect afterwards speedily closes up.

SECTION II.—MACHINERY.

No Articles in this Section have been contributed.

SECTION III.—MANUFACTURES, ETC.

125. **ORNAMENTED HAMMOCK.** Contributed by Mrs. BARKLY.
Made of silk grass, supposed to be the fibre of a species of *Bromelia*, or of
Agave vivipara, *Lin.*, ornamented with the feathers of the Toucan, Macaw,
&c.
126. **ITA or ETA PALM HAMMOCK.** Contributed by J. S. STUTCHBURY.
Made of the fibre of *Mauritia flexuosa*, *Lin.*
127. **ROPES** to Ditto. Contributed by J. S. STUTCHBURY.
Of silk grass.
128. **HAT.** Contributed by Mrs. BARKLY.
Made of the bark of the Ita Palm.
129. **INDIAN HEAD DRESSES.** Contributed by Mrs. BARKLY.
Head Dresses, ornamented with feathers, worn by the chiefs.
130. **CASE of PAGALAS, or PACKALLS.** Contributed by W. H. HOLMES.
Made of the outer rind of the Ita Palm, and much used in the colony as
baskets.
131. **SHAAK-SHAAK.**
From the River Demerary. A child's toy, and used by the Indians in their
dances.

132. FANS.

Made from the Ita Palm.

133. MATAPI, or CASSAVA SQUEEZER. Contributed by DAVID SHIER.

Made of the Ita Palm. Used by the Indians for expressing the juice from grated Cassava. Before being filled, it is compressed as far as possible, so as to increase its diameter; it is then filled and suspended from a beam, and a lever is inserted into the lower loop, to the long end of which a weight is applied, by which the Matapi becomes elongated. It will be observed that the change of form in the vessel will tend to diminish its cubic contents, and when stretched to its utmost length its capacity will be diminished by nearly one third: hence its applicability for effecting expression.

134. ETAMI, or CASSAVA SIFTER. Contributed by J. F. BEE.

Used by the Indians. Made of the Ita Palm.

135. MODEL of INDIAN HOUSE. Contributed by MRS. BARKLY.

This contains models of an Indian establishment of the Arrawaak tribe, viz.:—

- | | |
|---|--|
| No. 1. Matapi, or Cassava Squeezer | 14. Hammock and Indians |
| 2. Marrowa, or Blunt Arrows, for shooting small birds | 15. Corialla, or Canoe |
| 3. Simarra, ordinary Arrows | 16. Nahloe, or Paddles |
| 4. Bow | 17. Pagala, or Packall |
| 5. Fishing Rods | 18. Benches |
| 6. Maquarri, whips made use of in funeral dances | 19. Etami, or Sifter |
| 7. Marakka, or Rattle, made use of by Peaimen, or medicine men, in their incantations | 20. Quaick, or Basket |
| 8. Shaak-shaak, or child's rattle | 21. Cassava Bread Basket |
| 9. War Club | 22. Cassava Trough |
| 10. Awiarri, or Flute | 23. Metapi Lever |
| 11. Onolli, or species of Crane | 24. Plate for baking Cassava Bread |
| 12. Ditto ditto | 25. Cooking Rack |
| 13. Hammock and Indian | 26. Goglets |
| | 27. Bock or Buck Pots, in which pepper-pot is made |
| | 28. Bouradi, or beak of Toucan, used as an ornament. |

136. COTTON HAMMOCK. Contributed by Miss Ross.

This is made of the wild cotton from the interior of the colony, referred to in Sir R. SCHOMBURGK's description of British Guiana as remarkable for its fine long staple, silky appearance, and excellent quality. Full-sized hammocks made of this material, command a price from three to four times higher than those of English manufacture.

137. SPUN COTTON. Contributed by BERNHARD RIES.

From River Pomeroun. This is also the wild cotton of the interior.

138. FISHING NETS, of SILK GRASS. Contributed by J. S. STUTCHBURY.

Of Indian Manufacture.

139. BASKET. Contributed by GEORGE DENNIS.

Used by the Indians, when travelling, slung from their Shoulders.

140. ENTIRE WARDROBE of a Female Indian of the Warrow Tribe. Contributed by GEORGE DENNIS.**141. INDIAN WAR CLUB.** Contributed by T. B. DUGGIN.

From River Berbice.

142. **INDIAN WAR CLUB.** Contributed by ROBERT ARNOTT.
From River Demerary.
143. **INDIAN WAR CLUB.** Contributed by ROBERT ARNOTT.
144. **BLOW PIPE and QUIVER, with POISONED ARROWS,** used by the Indians. The inner tube of the Blow Pipe is a single internode of the *Orundinaria Schomburghkii*. Benth. These internodes are sometimes 16 feet in length. The arrow is inserted into the tube, having a dossil of cotton around its lower end; aim is taken and the arrow projected by a sudden expiration. Accompanying the quiver, there is the maxilla of a fish which is used for partially cutting the poisoned end of the arrow, so that that portion may break off and remain in the wound. This cutting is effected by rapidly turning the arrow between the teeth of the maxilla.
145. **BOW and ARROWS.**
Bow made of Washiba, used by the Indians.
- 145a. **BOW and ARROWS.**
Bow made of Washiba, ditto.
146. **WINNA.** Contributed by T. B. DUGGIN.
From River Berbice. Used by the Indians for inclosing tobacco, in the form of Cheroots for smoking; and said to be made of the rind of the fruit of the Manicote Palm, *Areca Manicot*, Lodd.
147. **BUCK POT.**
Used in preparing pepper pot.
- 147a. **BUCK POT.**
Used in preparing pepper pot. These pots are made, by the Indians, of a peculiar description of clay found on the banks of the rivers in various parts of the colony.
148. **INDIAN FLY BRUSH.**
- 148a. **WALKING STICK of LETTER WOOD.**
Carved by the Indians.
- 148b. **ADADA, or WOOD-SKIN.** Contributed by J. OUTRIDGE.
From the River Demerary. This is the bark of the Purple Heart Tree, called by the Indians *Mariwayana*. Sir R. SCHOMBURGK says—"They take off the bark of this tree when fresh cut down, and, with very little trouble, convert it into a Canoe, commonly called a 'Wood-skin;' some of which are large enough to carry 20 to 25 persons with perfect safety on smooth water." During the month of February, of the present year, the Contributor and two other persons, weighing together not less than 500 lbs., descended or "shot" the Rapids, about 100 miles above the estuary of the River Demerary, in this Wood Skin, in perfect safety. The seats commonly made use of in Wood Skins consist of two or more light cylindrical pieces of wood, the ends of which are notched and rest upon the gunwale. The wood skin sent measures $18\frac{1}{2}$ feet in length, and about 28 inches in width. Accompanying it are two paddles made of Yaruri, or Paddle-wood.
149. **QUAICK, or COVERED BASKET.** Of Negro manufacture, made of a Palm, called Moucouron.
150. **BASKET,** such as is used in Coffee Picking. Of Negro manufacture, and made of Moucouron.
151. **HAND BASKET.** Of Negro Manufacture.

152. **TWO BASKETS.** Of Negro manufacture, made of the Cabbage Palm.
Areca, montana Lodd.
153. **CALABASHES.** The shell or rind of the fruit of *Crescentia Cujete, Lin.*
154. **DOOR LOCK.** Contributed by MATTHEW STEELE.
Made of Greenheart, and in use among the Creoles of this colony.
- 154a. **DOOR-LOCK.** Contributed by MATTHEW STEELE.
Made of Greenheart. Another form.
155. **DOOR-LOCK.** Contributed by MATTHEW STEELE.
Made of Crabwood, and in use among the Creoles of this colony.
- 155a. **DOOR-LOCK.** Contributed by MATTHEW STEELE.
Made of Crabwood. Another form.
- 155b. **DOOR-LOCK.** Contributed by MATTHEW STEELE.
Made of Crabwood. Another form.
156. **WALKING-STICKS.** Contributed by J. F. BEE.
From the River Demerary. Made from the outer part or rind of the Tooroo Palm.

SECTION IV.—SCULPTURE, MODELS, AND THE PLASTIC ARTS.

No Articles in this Section have been contributed.

The following DIAGRAMS are sent to indicate the Temperature of the Climate in which the Vegetable Productions mentioned in this Catalogue have been produced.

157. **DIAGRAM.** Contributed by P. SANDEMAN.

Showing the course of Temperature at Georgetown, Demerary, during part of the year 1845, and during the years 1846, '47, '48, '49, and '50, constructed from Tables of Daily Mean Temperature, deduced from ten Daily Observations, taken during the above period, at the Georgetown Observatory.

- 157a. **DIAGRAM.** Contributed by P. SANDEMAN.

Showing the Mean Course of Temperature at Georgetown, Demerary, of five years, from 1st of November, 1845, to 1st of November, 1850, from Tables of Daily Mean Temperature, deduced from ten Daily Observations, taken during the above period, at the Georgetown Observatory.

DANIEL BLAIR,
DAVID SHIER,
J. S. STUTCHBURY,
W. H. CAMPBELL,

Sub-Committee appointed to prepare the Catalogue.

By Order of the Central Committee of British Guiana,

W. H. CAMPBELL, *Honorary Secretary.*

Georgetown, Demerary, March 12th, 1851.

CATALOGUE
OF
CONTRIBUTIONS
TRANSMITTED FROM
BRITISH GUIANA,
TO THE
PARIS UNIVERSAL EXHIBITION
OF
1867.

PRINTED FOR
THE COMMITTEE OF CORRESPONDENCE
OF THE ROYAL AGRICULTURAL AND COMMERCIAL SOCIETY.

LONDON:
EDWARD STANFORD, 6, CHARING CROSS, S.W.
1867.

CONTENTS.



MAPS OF BRITISH GUIANA. FROM SURVEYS BY THE LATE SIR
ROBERT SCHOMBURGK.

DIAGRAM OF TEMPERATURE, WEIGHT OF ATMOSPHERE, AND FALL
OF RAIN, FOR A PERIOD OF NINE YEARS, COMMENCING 1ST
NOVEMBER, 1845. BY THE LATE P. SANDEMAN.

	PAGE
COMMITTEE OF CORRESPONDENCE	v
INTRODUCTION	vii
PREFACE, CONTAINING SHORT ACCOUNT OF BRITISH GUIANA AND ITS PRODUCTIONS	xi
NOTE A. MONTHLY FALL OF RAIN AT GEORGETOWN, FROM 1846 TO 1857	xciii
NOTE B. MEMORANDUM OF EXPORTS AT VARIOUS PERIODS, FROM 1747 TO 1861	xciv
NOTE C. TABLE SHOWING THE SPECIFIC GRAVITY OF 59 SPE- CIMENS OF WOODS	xcv

CATALOGUE:—

SECTION A. SACCHARINE PRODUCTS AND ARTICLES OF FOOD .	1
SECTION B. FIBROUS SUBSTANCES	14
SECTION C. CHEMICAL AND PHARMACEUTICAL ARTICLES AND PRODUCTS	17
SECTION D. WOODS FOR BUILDING AND OTHER PURPOSES. .	25
SECTION E. INDIAN MANUFACTURES AND MISCELLANEOUS AR- TICLES	34
SECTION F. NATURAL HISTORY	41
SECTION G. MISCELLANEOUS	44
INDEX	47
LIST OF CONTRIBUTORS	51

1867.

GOVERNOR OF BRITISH GUIANA.

HIS EXCELLENCY FRANCIS HINCKS, Esq., C.B.

LIEUTENANT-GOVERNOR.

(Administering the Government during the absence of the Governor.)

HIS EXCELLENCY MAJOR ROBERT MILLER MUNDY.

COMMITTEE OF CORRESPONDENCE.

J. TROUNSELL GILBERT, *Chairman.*

W. H. CAMPBELL, LL.D., *Vice-Chairman.*

F. A. R. WINTER, *Treasurer.*

H. C. WHITLOCK, M.D., *Honorary Secretary.*

REV. W. G. G. AUSTIN.

EDWARD GEORGE BARR.

JOHN BRUMELL.

NICHOLAS COX.

H. G. DALTON, M.D.

R. T. A. DALY.

WILLIAM FRESSON.

HENRY T. GARNETT.

O. A. GILBERT.

JOHN S. HILL.

SIR W. H. HOLMES.

R. W. IMLACH.

C. M. JONES.

WILLIAM KNIGHT.

GEORGE LILLIE.

GEORGE H. OLIVER.

W. B. POLLARD, JUN.

DAVID SHIER, M.D.

W. F. H. SMITH.

REV. E. A. WALLBRIDGE.

SUB-COMMITTEE APPOINTED TO PREPARE CATALOGUE.

J. TROUNSELL GILBERT, *Chairman.*

W. H. CAMPBELL, LL.D.

DAVID SHIER, M.D.

WILLIAM WALKER.

REV. E. A. WALLBRIDGE.

H. C. WHITLOCK, M.D.

SPECIAL COMMISSIONER IN PARIS.

WILLIAM WALKER.



BY
SIR ROBERT H. SCHOMBURCK.



INTRODUCTION.

HIS IMPERIAL MAJESTY THE EMPEROR OF THE FRENCH having determined upon holding in Paris a second International Exhibition, upon the plan so successfully initiated in London in 1851, and subsequently followed up by similar Exhibitions in other cities, but upon a scale of unprecedented magnitude and splendour, Her Majesty's Government undertook to convey and to recommend to her Colonial possessions the invitation issued by His Imperial Majesty to them as well as to every other civilized community, to assist in the perfecting and to share in the honours of this great undertaking.

The Committee of Correspondence of the Royal Agricultural and Commercial Society of British Guiana therefore readily agreed to renew the efforts previously made to illustrate the natural and manufactured products of this important Colony—efforts which had been rewarded, not merely by the approval bestowed upon the Committee for the manner in which their duties had been performed, but by the yet more satisfactory evidence of a newly-awakened interest in the Colony itself, on the part of those who, for the first time, became aware of the value and diversity of the contributions it could offer in aid of the wants and the enjoyments of society.

The appeals made to the various classes of the local community to enable the Committee to fulfil their obligations, were found so practically beneficial to the people themselves, by exciting a spirit of emulation and stimulating their appreciation of treasures which, although

familiar to them, had previously been regarded with indifference, that Local Exhibitions, on the occasions of the Colony being represented in London and in Paris, were instituted, and attended with the most gratifying results. In conformity with the practice thus established, a Local Exhibition of the articles collected for transmission to the proposed Universal Exhibition at Paris was held on Thursday, the 27th of December, 1866, and was closed on the 1st of January ensuing. The opening ceremonial was presided over by the Lieutenant-Governor, then administering the Government; and the subjoined Address was presented to His Excellency by the Chairman on behalf of the Committee of Correspondence :

“ To His Excellency Major ROBERT MILLER MUNDY, Lieutenant-Governor of British Guiana.

“ MAY IT PLEASE YOUR EXCELLENCY :

“ On behalf of the Committee of Correspondence of the Agricultural and Commercial Society, I have to thank Your Excellency for your kindness in consenting to preside on this occasion.

“ The present is the third Exhibition of the kind that has taken place in this Colony. The first was held in January, 1855, and the second in August, 1861. These Exhibitions were not merely for local purposes, but were also respectively subsidiary to the representation of the Colony at the Paris Exhibition of 1855, and the London Exhibition of 1862.

“ The Exhibition now about to be opened has the same twofold purpose. In the first place, it is designed, locally, to promote among all classes of the community competition in the development of the industrial resources of the Colony. To this end all classes, from the capitalist who employs large means, and avails himself of all the scientific appliances at his command to increase and improve the staple products, to the peasant who lives by his daily toil, have been invited to contribute. It is gratifying to see that the invitation has been responded to in a manner creditable to all, and especially to those whose contributions are the result of their individual labour. In the second place, we hope that among the numerous objects of interest exhibited here, many will be found available for transmission to Paris; and that the high position among British Colonies, which was won by British Guiana at the Paris Exhibition of 1855, will be at least equalled at that of 1867.

“ Of course the main object of such an Exhibition as this is the production of articles of solid use and profit, but other contributions have not been excluded from the programme: and we are glad to observe in the present collection many objects valuable chiefly for their beauty or as curiosities, and many rare specimens illustrative of the Natural History of the Colony. And in addition to the use of such an undertaking, in its industrial, commercial, and scientific points of view, we feel that the meeting together in this manner, for a common purpose, of a large number of persons representing those members of their respective classes who desire to promote the advancement of the country in which they live, must,

regarded in a moral and social aspect, tend to foster good will, kindly feeling, reciprocal respect, and a mutual sense of the mutual benefits to be derived from energetic and enlightened co-operation.

“In conclusion, we trust that your Excellency’s part in the proceedings of to-day will be an act in your administration of this Government, which it will be agreeable to you to remember; and we respectfully beg that your Excellency will be pleased now to declare this Exhibition opened.

‘For the Committee of Correspondence.

“J. TROUNSELL GILBERT,

“Chairman.”

To which His Excellency was pleased to reply as follows :—

“The Honourable the President and the Members of the Committee of Correspondence of the Agricultural and Commercial Society.

“I thank you for the kind address you have now presented to me. I assure you that no more pleasing duty could have devolved on me during my short administration of the Government of this Colony than presiding at the opening of this the third Local Exhibition of the Products of British Guiana.

“I rejoice to hear that all classes have so freely and liberally responded to the call made on them to become contributors to this Exhibition; and thereby to develop the resources of this magnificent Colony. The thanks of the community at large are most justly due to all, but more especially are they due to that portion of the population who, by the sacrifice of some portion of their time and daily earnings, have contributed the products of their ready and skilful labour. I trust that the Committee will be able to make from the numerous objects of interest now about to be exhibited, such a selection for the Paris Exhibition of 1867 as will rival, if not excel, the contributions of British Guiana to the Exhibition of 1855. Meetings like this are most valuable, not only in exhibiting the specimens of the Natural History and Industrial Art of the country, to all comers, but by bringing together a population spread over such a vast area, all classes freely interchanging ideas, and being taught by the sight of the varied products of the Colony how much its best interests and prosperity depend on their mutual co-operation, good will, and kindly feeling of and for one another.

“I cannot conclude this answer to your address without thanking the Committee of Correspondence, both individually and collectively, for their labours on this occasion, and I trust that the success of this Exhibition, as well as the high position which British Guiana hopes to take at the Paris Exhibition in 1867, may reward them as they deserve.

“ROBERT M. MUNDY,

“Lieut.-Governor.”

His Excellency then declared the Exhibition opened.

It may not be out of place to state, in conclusion, that the Committee of Correspondence have come to the determination of holding

an annual Local Exhibition, which, however, shall not be restricted to specimens of local growth or manufacture, but be open to illustrative articles from any quarter, so as to gratify the curiosity of those who may not have the opportunity of visiting other countries, and to supply suggestive hints to the industrious and ingenious for the cultivation of their talents and the improvement of their tastes.

PREFACE.

THE name "Guiana" is given to that portion of the continent of South America which lies between 8 deg. 40 min. North and 3 deg. 30 min. South ; and 50 deg. and 68 deg. 30 min. West, an area calculated to contain 690,000 square miles : the coast line extending from the mouth of the River Orinoco to that of the River Amazon. It is divided into—

1. Venezuelan Guiana, lying on both sides of the Orinoco and extending S. and S.W. to the River Negro and the Brazilian settlements. Its north-eastern boundary is at a point near the mouth of the River Barima, which empties itself at the confluence of the Orinoco.
2. British Guiana, extending from the Venezuelan line of division to the River Corentyn.
3. Dutch Guiana, or Surinam, extending from the River Corentyn to the River Marawini in 54 deg. west long.
4. French Guiana, more commonly known as Cayenne, from the island on which the capital stands, extending from the River Marawini to near Cape North.
5. Brazilian Guiana, extending from the southern boundaries of French, Dutch, British, and part of Venezuelan Guiana, to the Rivers Amazon and Negro.

The peculiarity of the hydrographic system of this vast territory is well worthy of note, for the River Orinoco sends a tributary stream to the River Negro, which flows into the Amazon, thus completing the circuit of water communication—in other words, to adopt the illustration employed by Sir ROBERT SCHOMBURGK, a person getting into a canoe at Paramaribo, the capital of Dutch Guiana, might, by coasting to the west and ascending the Orinoco as far as the Cassiquiare, reach the River Negro, thence follow the Amazon to its mouth and return to Paramaribo by the coast of Cayenne, without the necessity of quitting his canoe. But the wonderful facilities possessed by this region for inland navigation do not end here—for, with a little trouble it might be extended to Santa Fè de Bogotá, and even, extraordinary as it may seem, to the Pacific Ocean on the west, and to Buenos Ayres on

the south. The River Napo offers communication with Quito; the Ucayali (or Uaycáli), with Cuzco; and the Hucllaga, with Lima.*

The general impression produced by the examination of the country is, that here we are in the last stage of a process that has been going on during the whole period of the elevation of the Andes and the mountains of Brazil and Guiana from the ocean. At the commencement of this period, the greater portion of the valleys of the Amazon, Orinoco, and La Plata must have formed a part of the ocean separating the groups of islands (which those elevated lands formed on their first appearance) from each other. At the point where the mountains of Guiana approach nearest to the chain of the Andes, the volcanic action appears to have been continued in the interval between them, throwing up the *sierras* of Curicuriari, Tunuhy, and the numerous smaller granite mountains of the Uaupés, and it is here probably that dry land first appeared connecting Guiana and New Granada, and forming that slightly elevated ridge which is now the watershed between the basins of the Amazon and Orinoco. The same thing occurs in the southern portion of the continent, for it is where the mountains of Brazil, and the eastern range of the Bolivian Andes stretch out to meet each other that the sedimentary deposits in that part appear to have been first raised above the water, and thus to have determined the limits of the basin of the Amazon on the south. The Amazon valley would then have formed a great inland gulf or sea about two thousand miles long and seven or eight hundred wide.†

The three Colonies of Berbice, Demerara, and Essequibo, formerly belonging to the Dutch, were captured in 1803, and finally ceded to Great Britain in 1814, and constitute the present Colony of British Guiana, thus first designated in 1831. They are now termed counties: of which, Berbice extends from the Corentyn to the Abari creek, or about 95 miles; Demerara, from the Abari to the Boerasiri creek, or about 65 miles; and Essequibo, from the Boerasiri to the site of the military posts formerly maintained by the Dutch on the Barima River,

* Cayenne may be also considered to be insulated; the province is not, it is true, surrounded on all sides by the sea, but the principal roadstead or Cayenne River, the Mahuri, and the Tour de l'Isle, a sort of canal which connects the two (perhaps somewhat resembling the Cassiquiare), really separate it from what may be called the mainland. It is related that a French brig, being chased by an English man-of-war, took refuge in the River Mahuri, preferring the risk of being lost to that of capture: assisted by the tides and towed by her boats she ascended the Mahuri, traversed the Tour de l'Isle, and at length reached the port, after a tedious and difficult navigation, the pursuer being doubtless puzzled to conceive what had become of her.—JUSSELAINE: "*Un déporté à Cayenne.*" Paris, 1865.

† Wallace, Agassiz, &c.

or about 120 miles ; thus making a sea façade of about 280 miles, by an interior depth, from north to south, varying from 300 to 450 miles. It is, of course, difficult to determine with exactitude the area of the Colony of British Guiana, since its boundaries, not only on the side of Venezuela but on that of Brazil, are undetermined. Assuming its limits to be those which the geographical features of the territory would indicate, the area would be equal to 76,000 square miles.

The Republic of Venezuela claims the country to the mouth of the River Moruca, from thence to the confluence of the Rivers Cuyuni and Massaruni along the western bank of the River Essequibo, to the confluence of the River Rupununi. The Brazilians having claimed as far north as the mouth of the Siparunus, the area of the Colony would then be reduced to about 12,300 square miles, and it would form the smallest of the three Colonies in Guiana which are possessed by European Powers.*

Indications are traceable of the interior of this great region having been at some former period the bed of a series of lakes, of which the waters, bursting their barriers, forced themselves passages to the Atlantic. The interior is diversified by ranges of mountains, extensive savannas, and dense forests. Of the former, the highest point yet determined is stated to be the remarkable peak of Roraima, in lat. 5 deg. 9 min. 30 sec. north, long. 60 deg. 47 min. west, which ascends to 7,500 feet above the level of the sea—the upper portion, about 1,500 feet, being simply a mural precipice of a peculiarly striking character.† The mountain ranges gradually approach the coast, until at about 40 miles from the sea, we find the last lines of elevated ground, consisting of a range of sandhills, and parallel with them, detached groups of hillocks—the former ranging from 30 to 120 feet in height, the latter seldom exceeding 200. No fossil remains whatever have been discovered.

The mountain ranges consist, for the most part, of granite,‡ gneiss, sandstone, &c., with their various modifications, all denoting a primitive formation, and wherever they cross the rivers which flow through the Colony, they form large cataracts extremely picturesque, but interposing great obstacles to inland navigation. At about 30

* Schomburgk.

† Humboldt remarks that a precipice of 6,000 or 7,000 feet perpendicular is much rarer than is commonly supposed ; and that a rock of 1,600 feet perpendicular has been sought in vain in the Swiss Alps.

‡ On a savanna in 2 deg. 50 min. N. there is a mountain composed of one entire solid block of granite, 700 feet in height ; and about 40 miles N.E. is another still higher. Granite seems to be more extensively developed in South America than in any other part of the world.

miles up the River Essequibo is an extensive bed of granite with hornblende, trending in a S.W. direction. The huge masses of granitic boulders accumulated in particular spots with more or less profusion constitute a peculiar feature of the rocky region, extending hence to the mountain ranges. The coast lands and cultivated districts of the Colony consist of an extensive mudflat, or alluvial deposit, composed chiefly of blue clay, impregnated with marine salt, and rich in decomposed vegetable matter. In the forest, or bush, bordering the cultivated lands, and occasionally in the savannas, extensive tracts of Pegass (tropical peat), sometimes of considerable depth, occur. The same formation has existed on great part of the cultivated lands, but from long continued tillage has become exhausted. This alluvial flat, a large proportion of the cultivated part of which is from three to four feet below high water-mark of spring tides, extends from ten to twenty, and in some instances, as between the Rivers Berbice and Corentyn, even to forty miles inland, and is terminated by the range of sandhills above mentioned. Its composition may be inferred from one of the many borings made in the Colony for Artesian wells. This was executed at Plantation *Woodlands*, one mile from the mouth of the Mahaica creek; and the following memorandum was taken during the process of boring:—1 to 5 feet, surface soil; 6 feet, layer of “caddy” or fine sand; 7 to 9 feet, blue clay; 9 to 39 feet, soft mud mixed with caddy in which the auger went down by its own weight; 39 to 53 feet, rotten wood and pegass,* 53 to 55 feet, bluish gray clay, stiff; 55 to 57 feet, clay, a little red and gray; 57 to 70 feet, reddish clay; 70 to 82 feet 10 inches, yellowish gray clay with a little sand and ochre, very stiff; 82 feet 10 inches to 86 feet 8 inches, bluish gray clay, streaked; 86 feet 8 inches to 92 feet bluish gray clay, streaked with yellow. The bed of sand from which the water was obtained was reached at a depth of 118 feet, and the same stratum was found at 125 feet. This water, much impregnated with iron, as are all such waters in this Colony, is delivered eighteen inches above the surface of the soil, and is greatly increased in quantity during the flood of spring tides.

The fact of the cultivated parts of the Colony consisting of an alluvial soil of such enormous depth, might be considered as a sufficient indication of its wonderful fertility. But aided by tropical heat

* It has been suggested by Mr. Hillhouse that the existence of these semi-carbonized remains of trees of a kind (*Curida*: *Avicennia nitida*) still growing on the coast, indicates the former surface of the land, then covered by immense forests which have been destroyed by fire, as appears by the ochrous substratum; but the correctness of this inference has been questioned.

and abundance of moisture, its productiveness surpasses anything that European agriculturists can imagine. The same land has been cropped annually during upwards of half a century without rest, without change of crop, and without manure, and to the last, yielding remunerative returns. But this surprising vegetative power is not confined to the coast regions only. SCHOMBURGK transmitted to Georgetown specimens of Cassava, Yams, and Indian corn, grown at the foot of the Pacaraima mountains, and they were acknowledged to exceed in size and quality those produced on the coast lands. Bunches of Plantains which he saw at the Canuku mountains, 3,000 feet above the level of the sea, were of the very largest size; and sugar-canes which he met with on mountains 2,300 feet high, measured seven inches in circumference, though they had received no weeding nor attention.

No active volcanoes are known to exist in British Guiana, and shocks of earthquake are comparatively rare and almost uniformly slight.

The chief rivers of this Colony are the Essequibo, the Demerara, the Berbice, and the Corentyn, the last mentioned dividing the British and Dutch possessions. The Essequibo, having its origin in the Aearai Mountains, 41 miles north of the Equator, has a course, including its windings, of not less than 620 miles, exceeding in length any river in France, and vying with the Vistula in Poland. After receiving many large tributary rivers it continues its northern course, growing gradually wider, until at its mouth it forms an estuary nearly 20 miles wide, with numerous fertile islands, several of which are from 12 to 15 miles in length, and under sugar-cane cultivation. In consequence, however, of interruptions caused by the cataracts before mentioned, it is navigable for large vessels for not more than fifty miles from its mouth. In the Demerara, the upper course of which is only known to the Indians, vessels of large burden have loaded timber 75 miles from its mouth. After a winding course, it gradually widens, and when it enters the sea is fully a mile and three quarters across. The Berbice in its upper course, approaches within nine miles of the Essequibo, in latitude 3 deg. 53 min. N. It occasionally narrows to thirty feet, and at times spreads into lake-like expansions. About latitude 4 deg. 19 min. N. the cataracts commence. Vessels of 12 feet draft can ascend 105 miles, and of 7 feet 175 miles, from its mouth, the influence of the tide being perceptible to nearly that distance. It is two and a quarter miles wide at its mouth. The Corentyn takes its rise about 25 miles east of the source of the Essequibo, probably in 1 deg. N. It is impeded in its course by the same tract of boulders which crosses the Rivers Essequibo and

Berbice, in latitude 4 deg. 20 min. N., forming a series of cataracts which in grandeur surpass all others in British Guiana. It is navigable for small vessels to about 150 miles from its mouth, which is variously estimated to be from 10 to 18 miles in width. The Canje Creek, as it is termed, falls into the Berbice River near its mouth. The Abari Creek, the Mahaiconi Creek, and the Mahaica Creek, all streams of considerable size, though inferior to the great Rivers, fall directly into the Atlantic between the Berbice and the Demerara. The Boerasiri Creek, as before mentioned, divides the Counties of Demerara and Essequibo; and between the Rivers Essequibo and Barima are the Rivers, or Creeks, Pomeroon, Morucca, and Wai-ini.

Notwithstanding the position of this territory, so near the equator, it enjoys a comparatively more equable and more temperate climate than other countries under similar parallels. This arises from the uniformly great length of night during which the earth has time to cool by radiation; from proximity to the ocean; from the prevailing wind being the N.E. Trade-wind, and from the favourable angle at which the coast lies to it. It is usually assumed that the year is divided into two wet and two dry seasons; but latterly the periods of such changes have not been well marked. In order to afford the most recent information on this subject, we append to this preface Tables of Monthly Means of Meteorological Observations made by the late Mr. P. SANDEMAN, of the Georgetown Observatory,* from one of which it will be seen that the annual fall of rain, during a series of eleven years, varied from 7 to 11 feet! It is, however, to be remarked, that although the amount of rain is so great, it seldom rains for twelve hours consecutively, and that a day rarely passes without fair weather and sunshine. The long dry season extends from the end of August to the end of November; the short dry season from the middle of February to the middle of April; but even during these seasons there are occasional refreshing showers.

The months of February, October, and November are the most delightful of the whole year. Thunder-storms sometimes occur at the change of the seasons; but fatal accidents from lightning are exceedingly rare. Squalls are not unfrequent at certain seasons; but hurricanes, or destructive gales of wind, have never occurred.

* P. xcii.—The necessity for removing the Observatory from the Militia Parade Ground in 1857, and the subsequent illness and death of Mr. Sandeman, have unfortunately caused the series of Magnetical and Meteorological Observations to be discontinued. It seems well worthy of consideration whether it might not be practicable to resume the Registers through the instrumentality of the staff employed at the Public Hospitals in Demerara and Berbice, and at the Penal Settlement in Essequibo.

The climate is commonly regarded as unhealthy, and prejudicial to Europeans especially ; but experience demonstrates that it is, under ordinary circumstances, as favourable to human life as that of many European countries. It is, nevertheless, true that the climate is not well adapted to the constitution of white persons coming from temperate regions to be employed in the cultivation of the low lands. It is unfortunately difficult to obtain exact data for calculations of the expectation of human life in the Colony, owing to the defective state of the statistical records relating to the population ; but the experience of the Life Assurance Institutions doing business there, which, however, has reference chiefly to selected lives of persons in the middle and upper ranks of society, is, on this point, highly satisfactory. The unfavourable impression in regard to the insalubrity of the climate has probably originated in the occasional occurrence of epidemic yellow fever, the subjects of which are almost exclusively from the stranger population, including especially seamen. These epidemics occur at long intervals, but they are still sufficiently close to keep up the distrust felt by persons unacquainted with the Colony. Such epidemics are chiefly confined to the towns at the mouths of the rivers, and rarely extend inland.* Sir R. SCHOMBURGK states, that “the salubrity of the interior is proverbial, and there are many instances of longevity among the settlers on the banks of the Rivers Demerara, Berbice, and Essequibo. The natural drainage is here so perfect, that all impurities are swept off by the torrents of rain, and the purity of the air is so great, that the planets Venus and Jupiter may be seen in the daytime. While descending the upper Essequibo in December, 1838, we saw, one afternoon at three o’clock, the sun, the moon, and the planet Venus.”

The diversified surface of this province presents the utmost variety of indigenous productions, while many vegetable exotics have been, from time to time, introduced, and have readily adapted themselves to the climate and soil. Vegetation is perpetual, and the never failing verdure is of surpassing brilliancy. The grandeur of nature’s gigantic efforts, displayed in the vast size, varied forms, and extraordinary rapidity of growth of the Vegetable Kingdom, strike the stranger, accustomed only to the less luxuriant aspect of colder regions, with astonishment and delight. The peculiar and distinguishing feature of the coast is a fringe or belt of mangrove and curida trees, immediately behind which comes the cultivated strip

* Vide Table, p. xcii.—In Cayenne, the yellow fever is stated to have disappeared between 1804 and 1850 ; it returned, however, in 1855, and was very fatal for three years consecutively.—JUSSELAÏN.

of land—for compared with the whole extent of available soil, it is little more. In the interior, well watered savannas of great extent and dense forests cover the intervening space to the base of the mountain ridges. In these primitive scenes lofty trees tower to a surprising height, their trunks and branches decorated with parasites, and interlaced by *lianes*, or “bush ropes,” which in some cases, after surmounting the highest branches, again descend to the ground and take root afresh. Palm trees of various kinds mingle their graceful foliage with that of the forest trees, and even the waters are covered with appropriate floral treasures. Birds, insects, reptiles, in inexhaustible variety, people the otherwise silent solitudes of these vast domains—occupied only by scattered tribes of Indians, the representatives of the aboriginal possessors.

The forests of Guiana, it is almost needless to say, are capable of affording, to any extent, supplies of timber, unsurpassed in size and durability, for house or ship building purposes; and of woods suitable for articles of household furniture or fancy cabinet-work; while many of the trees and plants yield medicinal substances and products of great commercial value in the arts, which have been as yet but imperfectly investigated. Its waters, both salt and fresh, teem with innumerable varieties of fish, many possessing dazzling brilliancy of colour, and valuable as food; but the habits and qualities of the greater portion of which are as yet unknown. Its mineral wealth is yet untouched, though the precious metals are known to exist, with the probability, at least, of the existence of other crude materials of importance.

According to SCHOMBURGK, the earliest accounts extant relative to the coast of Guiana, state that in 1580 some inhabitants of Zealand, one of the provinces of Holland, affected a settlement near the River Pomeroon, and subsequently on the banks of the Essequibo. In 1613 these settlers reported the Colony to be in a flourishing condition, and in 1621 the Government undertook to supply the Colonists with negro slaves from Africa. In 1657 the Rivers Pomeroon and Morucca were settled anew by Zealanders, and the towns of New Zealand and New Middleburg were erected on their banks. About the same time settlements had also been effected in the Berbice River. In 1732 a constitution appears to have been granted to Berbice, and in 1739 to Demerara, by the States General. The colonization of Essequibo and Demerara, in the mean time, proceeded very slowly, and no mention is made of any settlement having been effected in the Demerara River till 1745, when the Directors of the Chamber of Zealand granted permission to lay out a plantation on the uninhabited banks of that river.

In 1781 the British took possession of the whole of the Dutch West India Colonies, but at the peace of 1783 they were restored to Holland, when they were almost immediately after taken possession of by the French, who built forts on both sides of the River Demerara at its mouth. In 1796 the Colonies of Demerara and Essequibo and of Berbice, being again in the possession of the Dutch, were surrendered to the British, under whose protection their agriculture and commerce increased rapidly; and before they were restored at the peace of Amiens, in 1802, to the Batavian Republic, the exports had risen to nearly 20,000 hogsheads, equal to 35,840,000 lbs. of sugar, and about 10,000,000 lbs of coffee. On the breaking out of the war in 1803, they were again surrendered to the British, in whose possession they have ever since remained.

The cultivation was carried on by the labour of slaves, imported chiefly from the coast of Africa. In 1808 the African slave trade was partially abolished, but slaves continued to be introduced in limited numbers, until the final abolition of the slave trade in 1814. It is difficult to ascertain the numbers of these slaves at different periods; but when the first registration was made in 1817 they then amounted to 101,712. From this period to the 1st of August, 1834, when slavery throughout the British possessions was entirely abolished, their numbers had decreased to 82,824, being the total slave population of the Colony on which compensation was claimed. This decrease, generally attributed to the effects of the system of slavery itself, is more correctly supposed to have arisen from the disparity between the numbers of males and females imported. A few facts relative to the progressive production of the Colony will be found subjoined.

By the census of 1841 the population was returned at 98,139. By the census of 1851 it was classified as follows:—

Natives of British Guiana	..	..	..	..	86,451
Natives of Barbados	..	..	..	..	4,925
Natives of other West India Islands	...	...	...	...	4,353
African Immigrants	..	..	..	..	7,168
Africans introduced prior to the Abolition of the Slave Trade	..	..	..	..	7,083
Madeiraans	..	..	..	..	7,928
English, Scotch, Dutch, Americans, &c.	..	..	..	..	2,088
Coolies from Madras	..	..	..	..	3,665
Coolies from Calcutta	..	..	..	..	4,017
Not stated	..	..	..	..	17
Total	..	..	..	..	127,695
Exclusive of Aborigines and Military and Seamen, estimated at	..	..	..	..	8,229

The census of April, 1861, gives the subjoined results :—

Natives of British Guiana	..	..	..	..	93,861
Natives of West India Islands	..	..	..	..	8,309
Natives of Madeira, Azores, or Cape de Verde	..	..	..	..	9,859
Natives of Europe	..	..	..	..	1,482
Natives of North America	..	..	..	..	147
Natives of Places not before mentioned	..	..	..	..	298
Immigrants from Africa	..	..	..	..	9,299
Do. Madras	..	..	..	..	3,664
Do. Calcutta	..	..	..	..	18,416
Do. China	..	..	..	..	2,629
Born at Sea	..	..	..	..	28
Not known	..	..	..	..	34
Total					148,026
Exclusive of Aborigines, estimated at	..	..	..	..	7,000
Merchant Seamen and Military	..	..	..	..	881
Grand Total					155,917

Immediately on the taking effect of the Emancipation Act, efforts were made to supply the deficiency of labour consequent on the withdrawal of the predial slaves from the cultivation of the soil. In the first instance, the West Indian islands were had recourse to, and shortly afterwards Madeira, which has afforded a liberal supply of a class of most useful people now permanently domiciled in the Colony. From the East Indies systematic immigration commenced in 1845 (there had been a tentative experiment on a small scale in 1838), and has been continued annually ever since, with the exception of 1849–1850, when the arrangements were interrupted by political difficulties in the Colony. In 1853 two cargoes of Chinese were imported, and in 1859 immigration from China commenced under Government supervision, and has continued until now, when it has encountered a serious obstacle, owing to a convention entered into between the Imperial Government and the representatives at Peking of Great Britain and France, one of the stipulations of which is, that such immigrants shall, on the expiration of their terms of service under contract, become entitled to be sent back to China at the expense of the Colony. Although immigration from China has been carried on uninterruptedly for so many years, such a condition is now, for the first time, insisted on; and while it is uncalled for in the interest of the immigrant, it creates a burthen too onerous for the Colony to sustain. It is, therefore, confidently hoped that, on reconsideration, it will be revoked.

The total number of immigrants of all classes introduced into the Colony of British Guiana from the 1st January, 1835, to the 31st December, 1866, is as under :—

East Indians	..	..	..	..	55,795
Chinese	..	..	..	..	12,631
Africans	..	..	..	..	13,355
Madeirans	..	..	..	..	27,076
Cape de Verdes	..	..	..	..	819
Azores	..	..	..	..	164
West India Islands	..	..	..	..	20,533
					<u>130,373</u>

to which may be added 208 Maltese, introduced in 1839; 70 from the United States, in 1840; and 21 from England, in 1851; making a grand total to the 31st December, 1866, of 130,672.

Of these, immigrants from the East Indies have, to some extent, availed themselves of the privilege of return passages provided for them at the public expense: on the 30th June, 1866, there were located on estates under indenture immigrants, chiefly if not altogether Indians and Chinese, to the number of 28,619 males, and 9,860 females, making a total of 38,459: the average mortality amongst those people for the half-year was 2·34 per cent. throughout the Colony. Of course, the mortality had been greater in some localities than in others; and it is, as might be expected, always greater in proportion amongst the newly-arrived immigrants; but it is gratifying to be able to state that there has been a gradual diminution of immigrant mortality since 1861. It should be pointed out, moreover, that the above total of 38,459 by no means represents the available labour-supply afforded by immigrants now in the Colony, a very large number being free from contracts of service, and yet usefully employed in various ways.

Having alluded to the right of returning to their native country exercised by the Indian immigrants, it may not be uninteresting to quote one instance, by way of illustrating the real position of immigrant labourers in the Colony:—The ‘Clarence’ left Demerara in September, 1865, with 469 immigrants, of whom 389 were adults. The amount of savings they carried back with them was £11,235. 4s. 2d., representing an average for each (excluding the children, who could not be supposed to have earned much) of £31. 10s. 8½d. for the Calcutta immigrants, and of £10. 14s. 5d. for each Madras immigrant.

This was exclusive of jewellery and other valuables carried on their persons. As an incidental proof of the general contentment of such immigrants with their condition in the Colony, it may be stated that during the year ending 30th June, 1865, nearly six thousand immigrants voluntarily renewed their contracts for a further term of five years' service.

With regard to the Chinese, it may be asserted that, on the whole, they have established their claim to be regarded as a most valuable and important class of the population, although the cost of their introduction has ranged much higher than for any other description of immigrants. They have been in many instances difficult to acclimatize, and a considerable number had never been accustomed to agricultural pursuits. As permanent dwellers in the Colony, they are likely to contribute essentially to its material prosperity, if we can form any opinion from their influence elsewhere, and from the degree of success which has thus far attended the experiment of a free settlement on the River Demerara, under the exclusive management of one of their own race, Mr. O TYE KIM, a man of superior endowments and energy, who has devoted himself to the furtherance of the spiritual and temporal welfare of his countrymen in Guiana. The subjoined brief details of the circumstances of the village alluded to, called Hope Town, in compliment to the gallant Vice-Admiral Sir JAMES HOPE, late Naval Commander-in-Chief of the Station, may not be uninteresting :—The inhabitants have cleared about five miles on the banks of the river and its tributary creeks; they have erected dwellings in uninterrupted succession along the clearing; they have built forty ovens, at a cost of sixty dollars each, for burning charcoal, and have succeeded in reducing the price of that indispensable commodity 30 per cent. The trade had previously been monopolized by the Madeirans, who burn their charcoal in pits. The ovens are considered to be a decided improvement. The settlers have, moreover, planted ginger, sweet potatoes, plantains, and other vegetable products. They have pigs valued at \$1,000; they have planted 150 acres in rice, calculated to yield 600 bags valued at \$9 each; the population is 170, of whom 40 are Christians; they are well fed, well clothed, and comfortable; they have had but one death; on the other hand, there has been but one birth. They have erected a temporary chapel and school-house, of neat construction, as might be expected from them. They possess three large punts besides bateaux, and they keep up a constant trading intercourse with the capital. The report concludes with this significant fact: there has been as yet no case brought before the magistrate. The settle-

ment has been in existence little more than two years, and has had to contend with many difficulties.

A few particulars of the distribution of immigrants in the Colony may fitly wind up the foregoing observations. There are 128* estates on which immigrants are located under indenture, namely, in the

County of Berbice	19
County of Demerara, East Coast ..	33
„ „ River District ..	19
„ „ West Coast ..	18
	— 70
County of Essequibo Islands	19
„ „ Arouabiscæ † Coast	20
	— 39

Hospitals, medical attendance, medicines, nourishment, and nurses are by law provided on all these estates. In the great majority of instances, each estate is so furnished, but in a few cases joint hospitals for two or three estates are permitted under the express sanction of the Governor and Court of Policy. Of the last mentioned, two are on the east coast of Demerara; one is in the River district, one on the west coast, and two are in the Essequibo Islands. The hospitals contain accommodation for from 10 to 80 beds each, there being but few with less than 30 beds. The number of immigrants allotted to estates varies, of course, according to the requirements of each property. It may be stated to run from 50 to 600, few estates having less than 100, whilst more than two-thirds of the estates have 200 and upwards. The number of medical men employed in charge of these estates' hospitals is 23.

Assuming the rural population, according to the results of the latest census, to stand thus—

County of Demerara	62,195
County of Essequibo	27,959
County of Berbice	24,119
Representing a total of ..	<u>114,273</u>

we find that upwards of 58,000 are returned as inhabitants of villages, so that even deducting women and children, there would apparently remain labourers enough to raise the crop to considerably more than its present largely increased return, if they only worked with ordinary

* In the year 1829, there were 230 sugar estates, and 174 coffee and cotton estates; in 1849, there were but 180 of the former and 16 of the latter; in 1864, 167 sugar estates and 6 coffee estates are enumerated in the local Directory.

† This is popularly known as the “Arabian” Coast.

assiduity; but as regards the native or creole peasantry, they scarcely work at all on Saturday and Monday, very little on Friday, and seldom more than from five to six hours on each of the other three days. It is therefore evident that, failing any improved disposition on their part towards industrial pursuits, by which an adequate supply of labour would be afforded, the sole dependence of the Colony for its future prosperity, and even its existence as a producing and exporting country, is upon the maintenance of a constant stream of immigration.

The population of Georgetown amounted

In 1829 to	..	..	..	..	..	12,604
In 1841 to	..	..	..	..	..	18,585
In 1851 to	..	..	..	..	..	25,508
In 1861 to	..	..	..	..	..	29,174

The only other town of importance is New Amsterdam, near the mouth of the River Berbice, formerly the seat of Government of Berbice, when that country was a separate Colony. Its population in 1851 was 4,633, in 1861 it was returned at 4,579.

The seat of Government for Demerara and Essequibo, which had previously been on Fort Island, in the River Essequibo, was in 1812 transferred to Stabroek, now called Georgetown, on the River Demerara, which, on the union of Berbice with the other counties in 1831, became the metropolis of British Guiana.

The positions of the light-house and of the light-ship, immediately beyond the bar of the Demerara River, about nine miles from the light-house, have been fixed by observation, as follows:—

	LAT. N.			LONG. W.		
			Space.			Time.
Light-House	..	6 deg. 49 min 54 sec.	..	56 deg. 6½ min.	..	3h. 52m. 25 sec.
Light-Ship	..	6 deg. 55 min. 33 sec.	..	58 deg. 1½ min.	..	3h. 52m. 6 sec.

Georgetown is situated at the mouth of the river, and being originally established by the Dutch, resembles in arrangement the maritime towns of Holland. The streets are wide, and laid out at right angles to each other; the principal of them have canals running through them, and are generally lined with trees. The dwelling houses, which are of wood, erected on pillars of brick, and commonly two stories in height, are for the most part detached, and stand in the centre of a garden. The effect therefore, when viewed from the gallery of the Lighthouse or the dome of the Public Buildings, is very striking and agreeable. "Water Street," a long street running along the bank of the river, is the chief seat of commercial business, and owing

to the occurrence in 1864 of two extensive and destructive fires, the opportunity has been seized to effect material improvements by widening it in the narrower portions. This street is usually a scene of great bustle, the river being crowded with merchant vessels discharging cargoes, either in the stream or alongside the stellings, as the wharves are there called, or loading with produce. New Amsterdam, the chief town of the county of Berbice, is situated on the east bank of the river of that name, and is very neatly laid out, but is not nearly so large as Georgetown.

It may be briefly stated here, that the political constitution of this important dependency of the British Crown is peculiar, having been adopted with some gradual modifications from that established by its Dutch possessors. The executive power is vested in the Governor. The legislative authority is exercised by a body of ten, termed the Court of Policy, including the Governor, the Attorney-General, the Government Secretary, and the Administrator-General. The remaining five members are selected by the Court from a double nomination sent up by a body called the College of Electors, consisting of seven members holding office for life, who are elected according to districts by a duly qualified constituency. The Court of Policy has of itself no financial authority, the annual taxes being voted, and the annual expenditure settled by it, only when combined with another body of six members, termed the College of Financial Representatives, elected in the same way as the College of Electors, each member holding office for two years only, but being eligible for re-election.

In this Colony the Roman-Dutch law is in force in civil cases, modified by Orders in Council and Local Ordinances, as the statutes passed by the Legislature are called; the Criminal Law is the same as that of Great Britain, and is administered in the same manner, except that there is not the intervention of a Grand Jury.

The staple products of the Colony were formerly described as sugar, rum, coffee, and cotton; they may now be quoted as sugar, rum, molasses, and timber,—cotton having altogether ceased to be exported for a long series of years, until the civil war in the United States, by giving a stimulus to the production of cotton in other parts of the world, induced some efforts to be made for its re-establishment in this Colony; the uncertainty as to the maintenance of remunerative prices in the home markets, owing to the high cost of labour in the Colony, will probably prevent the attainment of any satisfactory result in this respect; and coffee no longer appears in the Custom-house returns of exports.

The quantities of the staples exported in the years 1851 to 1861, both inclusive, were—

Year.	SUGAR. lbs.	RUM.* Galls. Imp.	MOLASSES. Galls. Imp.	TIMBER. Cubic Feet.
1851	66,667,776	1,458,016	905,350	177,780
1852	94,851,680	2,255,840	957,125	127,356
1853	65,457,168	1,729,048	626,335	144,031
1854	83,738,368	2,651,808	241,585	206,962
1855	88,585,600	2,872,846	175,076	173,914
1856	82,571,200	2,387,075	556,048	297,354
1857	94,025,600	2,531,358	653,660	330,772
1858	94,267,200	2,587,895	314,272	257,508
1859	88,388,800	2,359,048	143,152	276,378
1860	99,513,800	2,602,035	258,888	493,922
1861	115,755,200	2,728,913	319,884	825,230
1862	104,000,400	2,491,000	310,684	652,112
1863	122,368,000	2,873,940	524,768	408,769
1864	117,300,000	2,475,082	1,162,788	816,812
1865	137,776,000	2,976,920	1,329,814	503,849
1866	146,528,000	2,908,187	1,396,606	249,614

Of cotton there were exported in the—

Year	Bales.	Bags.
1863	52	—
1864	239	—
1865	591	59
1866	515	35

The bales were calculated at 300 lbs., and the bags at 80 lbs. each.

Many of the more important products of the Colony have on occasions of previous exhibitions been brought prominently before the notice of the public, and it is confidently hoped that the list of exports may speedily assume a more diversified character. The fibrous plants of the Colony are well worthy of a more rigorous investigation than they have as yet been subjected to. In section B several of the more important fibres are alluded to, and the beauty and strength of some of them may be judged of by an inspection of the hammocks and other articles manufactured from them. Fibres applicable to the manufacture of cordage and of various textile fabrics might be furnished by this Colony to an extent practically without limit; and amongst the minor exports may be enumerated shingles, firewood, charcoal, fish-glue, hides, and cocoanuts.†

As it is believed that the commercial importance of this Colony to the mother-country is not generally understood, it may not be out of

* The sum is stated in *liquid* gallons. If computed according to strength above proof, the results would be much higher—say 20 or 25 per cent. more.

† In 1840 the exports from French Guiana represented a value of upwards of four millions of francs; in 1857 they had fallen to below a million; in the same year the exports of British Guiana reached thirty-three millions of francs.—JUSSELAINE.

place to introduce the subjoined rough estimate of the amount of duties contributed by its produce to the Imperial Revenues under the fiscal regulations of the Home Government, even at the recently reduced rates of duties levied in 1866 :—

On 90,000 hhds. Sugar	..	..	..	£675,000
30,000 puns. Rum	..	..	..	1,769,000
15,000 casks Molasses	..	..	..	26,250
				£2,470,250*

an amount in the case of rum much beyond the market value of the commodity.

The imports into the Colony of goods from Great Britain again exhibit a consumption which will, it is believed, bear a satisfactory comparison with that of other customers of the British manufacturer. Taking the numbers of the population at the three epochs of 1841, 1851, and 1861, the average annual consumption per head, according to the tables of official values, would be about £5. 6s. 8d. sterling, a proportion which has exhibited no tendency to decrease, seeing that in the year 1864, making the most liberal allowance for increase of population, the amount would reach at least £5. 11s. per head.

As an illustration of the progress of the Colony, we may also quote the rapid development of its postal system within the last few years ; the whole charge of this department having been assumed by the Colonial Government in 1860.

NUMBER OF LETTERS RECEIVED FROM AND DISPATCHED TO ENGLAND AND THE ISLANDS.

Year.	Letters.	Increase on previous year.
1859	100,040	1,984
1860	111,602	11,562
1861	133,134	21,532
1862	144,245	11,111
1863	144,829	584
1864	152,351	7,522
1865	148,330	4,021 Decrease.
1866	167,965	19,635

NUMBER OF LOCAL LETTERS RECEIVED AT AND DISPATCHED FROM THE GEORGETOWN POST OFFICE.

Year.	Received.	Dispatched.	Total.
1859	14,633	17,076	31,708
1860	19,507	23,314	42,821
1861	23,234	26,701	49,932
1862	25,566	30,846	56,412
1863	27,065	38,689	65,754
1864	31,269	40,360	71,629
1865	37,303	49,417	86,720
1866	44,892	63,943	108,835

* This is of course subject to deduction for the quantities of produce which may be re-exported from Great Britain. The Expenditure of the Imperial Government in this Colony for 1861 was estimated at less than £40,000.

MONEY-ORDER BUSINESS BETWEEN GREAT BRITAIN AND BRITISH GUIANA, COMMENCED DECEMBER, 1863.

Year.	Issued.	Amount.	Paid.	Amount.
1863	61	£246 12 2		
1864	1,060	5,495 15 6	33	£171 14 8
1865	1,110	5,867 13 2	46	196 8 1
1866	1,441	8,980 0 0	60	338 12 1

LOCAL MONEY-ORDER BUSINESS, COMMENCED JULY, 1866.

Issued.	Amount.
95	\$2,236 99 = £446 0 9½

In 1859 the Colonial Post Office expenditure was \$2,710, and the revenue \$1,291. In 1860, expenditure, \$6,004 ; revenue, \$5,267 66. In 1861, the expenditure was \$9,221 98 ; and the revenue, \$8,415 90.

Again, the Savings' Bank is an interesting proof of the prosperous condition of the labouring classes, when they are industrious, and disposed to accumulate their earnings.

DEMERARA AND ESSEQUEBO BRANCH.

PERIODS.	No. of Depositors in each year.	Total No. of Depositors since Establishment	No. of Depositors at the end of each year.	Balance of Deposits at the end of each year.
From July 5 to 31st Dec., 1836	92	92	79	\$6,805 0
Jan. 1 to	1837	100	111	13,126 85
"	1838	106	298	16,475 88
"	1839	92	390	20,910 66
"	1840	128	518	25,170 66
"	1841	141	659	24,145 60
"	1842	130	789	21,665 18
"	1843	140	929	21,193 40
"	1844	116	1,045	23,096 21
"	1845	196	1,241	28,692 80
"	1846	254	1,495	33,025 73
"	1847	333	1,828	45,165 90
"	1848	299	2,127	46,218 91
"	1849	405	2,532	56,078 90
"	1850	521	3,053	64,901 75
"	1851	1,386	4,439	98,564 07
"	1852	682	5,121	106,685 06
"	1853	1,258	6,379	113,302 27
"	1854	1,019	7,398	128,071 27
"	1855	485	7,883	122,813 34
"	1856	601	8,484	116,600 85
"	1857	941	9,425	150,757 07
"	1858	730	10,155	147,060 52
"	1859	906	11,061	156,607 89
"	1860	892	11,953	179,869 12
"	1861	819	12,772	185,092 69
"	1862	822	13,594	174,397 15
"	1863	776	14,370	174,732 61
"	1864	1,210	15,580	210,053 94
"	1865	1,615	17,192	218,917 09
"	1866	1,442	18,579	221,557 09

BERBICE BRANCH, FROM 1845 TO 31ST DECEMBER, 1866.

PERIOD.	No. of Depositors in each year.	No. of Depositors at the end of each year.	Total No. of Depositors since Establishment.	Balance of Deposits at end of each year.
1845	84	84	—	\$9,926 32
1846	Not stated.	75	—	9,079 80
1847		97	—	10,180 53
1848		91	—	10,145 41
1849		109	—	11,697 20
1850	38	163	—	14,030 93
1851	182	203	—	17,445 35
1852	241	296	—	23,149 63
1853	106	304	—	23,185 67
1854	230	436	—	32,268 85
1855	224	531	—	41,076 35
1856	258	563	—	46,509 87
1857	355	685	—	56,489 68
1858	366	713	—	63,128 16
1859	321	737	—	67,270 71
1860	276	—	—	74,606 53
1861	982	842	—	82,395 04
1862	—	857	—	81,784 58
1863	—	829	—	84,112 40
1864	—	765	—	71,082 50
1865	—	793	—	66,762 42
1866	—	*739	—	60,956 65

Of the Educational Statistics of the Colony, the subjoined summary will afford a general idea, bearing in mind that it does not comprise the operations of the religious denominations maintained upon the voluntary principle :

Year.	Number of Children on the Books on 31st December.	Amount voted from Colony Chest for Educational purposes.
1861	7,713	\$58,802 45
1862	7,627	56,809 81
1863	8,251	56,756 77
1864	9,246	59,413 16
1865	10,109	63,560 00
1866†	—	67,895 00

A few additional Statistical Tables are added to contribute to the completeness of this summary.

* Of these 739, as nearly as possible one-half were natives, and one-half immigrants.

† Return not received in time.

NET GENERAL REVENUE AND NET GENERAL EXPENDITURE OF THE
COLONY OF BRITISH GUIANA, FOR THE YEARS COMMENCING 1851
AND ENDING 1866.

Year.		Revenue.			Expenditure.
1851	.....	\$767,796	42	.....	\$792,061 93
1852	.....	746,153	63	.....	989,456 75
1853	.....	840,880	33	.....	1,050,959 93
1854	.....	691,859	90	.....	875,373 33
1855	.....	1,055,754	14	.....	1,064,307 17
1856	.....	1,114,689	32	.....	1,041,801 51
1857	.....	1,279,457	99	.....	1,206,211 94
1858	.....	1,245,996	39	.....	1,209,017 22
1859	.....	1,318,153	68	.....	1,177,045 51
1860	.....	1,343,143	81	.....	1,452,159 17
1861	.....	1,458,018	61	.....	1,466,131 69
1862	.....	1,320,034	29	.....	1,425,407 20
1863	.....	1,255,800	31	.....	1,205,691 91
1864	.....	1,482,244	99	.....	1,198,599 83
1865	.....	—		.....	1,444,293 24
1866	.....	1,484,983	46	.....	—

The net annual receipts of the Colony, from the three principal sources of revenue, during the last ten years, were as under :

Year.		Import Duties.			Wine and Spirit.			Rum.
1857	..	£106,907	14 5½	..	£26,967	11 4½	..	£44,428 10 11
1858	..	107,108	11 11	..	26,350	12 11½	..	48,331 10 2
1859	..	130,006	8 10½	..	27,348	19 5	..	52,297 10 0
1860	..	126,349	6 10½	..	35,851	6 1½	..	50,798 2 2
1861	..	144,027	1 0½	..	33,776	14 3	..	47,875 7 7
1862	..	121,699	2 8	..	31,488	7 4	..	55,839 13 6
1863	..	115,211	12 1	..	35,659	12 5	..	52,290 18 4
1864	..	153,745	18 7	..	37,747	11 2	..	57,957 6 11
1865	..	155,837	6 7	..	44,803	11 3	..	58,317 8 8
1866	..	144,724	4 0	..	45,461	10 3	..	57,410 13 6

The expenditure for the same period under the three heads of Immigration, Public Works, and Hospitals and Poor, was as follows :

Year.		Immigration.			Public Works.			Hospitals and Poor.
1857	..	£26,955	3 1	..	£29,305	16 9½	..	£25,559 14 8½
1858	..	27,967	3 4½	..	40,013	16 2	..	30,124 2 5½
1859	..	24,358	17 4	..	34,265	9 1½	..	33,278 2 10
1860	..	50,943	16 10	..	45,034	8 11½	..	38,830 15 7
1861	..	61,810	11 9	..	28,224	18 11	..	39,691 3 8
1862	..	66,905	9 2	..	22,018	12 8	..	38,140 11 4
1863	..	76,430	0 0	..	23,291	9 8	..	34,489 0 1
1864	..	78,804	0 10	..	20,680	6 0	..	34,696 7 2
1865	..	104,274	10 5	..	22,988	11 8	..	37,871 13 5
1866	..	85,719	0 1	..	34,569	17 5	..	33,848 7 6

TONNAGE ENTERED AND CLEARED AT THE CUSTOM HOUSE, DEMERARA,
FROM 1857 TO 1866.

Year.		Entered.		Cleared.
1857	.....	155,192	.....	126,435
1858	.....	138,432	.....	122,317
1859	.....	141,705	.....	126,664
1860	.....	170,732	.....	136,572
1861	.....	183,593	.....	161,824
1862	.....	150,014	.....	133,652
1863	.....	152,755	.....	132,176
1864	.....	171,861	.....	145,082
1865	.....	171,465	.....	158,066
1866	.....	175,021	.....	161,962

VALUE OF THE IMPORTS AND EXPORTS FROM 1855 TO 1866.

Year.		Imports.				Exports.		
1855	.....	£886,016	0	0	.....	£1,331,371	0	0
1856	.....	893,897	0	0	.....	1,378,153	0	0
1857	}	Returns not compiled for these years.						
1858								
1859	.....	1,179,901	0	0	.....	1,311,265	0	0
1860	.....	1,145,959	0	0	.....	1,512,452	0	0
1861	.....	1,339,712	0	0	.....	1,583,649	0	0
1862	.....	1,107,181	6	0	.....	1,365,295	6	0
1863	.....	1,121,979	7	0	.....	1,679,385	11	0
1864	.....	1,508,560	3	0	.....	1,845,351	13	0
1865	.....	1,359,292	3	0	.....	2,069,639	0	0
1866	.....	1,530,674	15	0	.....	2,222,828	4	0

It is by no means uncommon to hear statements made on public occasions, or to read them in print, in which West India proprietors are alluded to in terms of disparagement, as deficient in energy and liberality in the management of their estates. The subjoined memorandum of the declared values of machinery imported for the use of estates in this Colony alone, for the ten years ended with 1866, may perhaps be admitted to weigh somewhat on the other side. It would have been easy to extend the period to which the return applies, with equally satisfactory results.

STATEMENT OF THE VALUE OF MACHINERY IMPORTED FOR ESTATES' USE DURING THE YEARS 1857 TO 1866, AND ADMITTED DUTY FREE.

Year.								
1857	..	..	..	..	..	..	\$124,564	39
1858	..	..	..	..	..	..	167,758	41
1859	..	..	..	..	..	..	191,863	31
1860	..	..	..	..	..	..	188,529	60
1861	..	..	..	..	..	..	159,492	72
1862	..	..	..	..	..	..	162,008	38
1863	..	..	..	..	..	..	137,916	42
1864	..	..	..	..	..	..	225,231	44
1865	..	..	..	..	..	..	257,965	56
1866	..	..	..	..	..	..	248,916	22
							\$1,864,246 45	

In conclusion, the Committee regard this as being a convenient opportunity for placing on record a few suggestions as to objects which it is desirable to keep in view in considering the means best calculated to lead to the full development of the natural resources of the Colony.

1. The boundaries should be once for all determined as between the Colony and Venezuela on the one side, and Brazil on the other ; and in doing this, we ought not lightly to be driven from the limits we claim geographically, and as assignees by right of conquest of the possessions of the Dutch. The tracts lying between the lines claimed by the first-named powers respectively, and the latter, are amongst the most valuable portions of the territory.

2. An inquiry into the validity of the existing land claims even in the cultivated tracts, but especially in the Crown lands in the interior, is highly important, with a view to the regulation of such as may be admitted, many of which are supposed to have been extended beyond their legitimate boundaries, and to the extinguishing of such as may prove to have no validity, but the doubts in respect of which preclude their being made available if required for public purposes.

3. Adverting to the greatly increased demand for the timber of the Colony, and to the fact that the wood-cutters are gradually tending towards new locations, it is important to consider whether measures ought not to be adopted to establish nurseries of such trees as are most in demand, which would become valuable when the present sources of

supply become more difficult to reach. There would seem to be no hardship in requiring the wood-cutters, as one of the conditions of their licence, to plant and keep a due proportion of such trees on their grants, subject to the supervision of the proper officers, or not to cut growing timber of less than a specified diameter. The rendering the navigation of the various falls less dangerous, or facilitating access to the tracts beyond them, by means of tramways alongside the rapids, are also matters worthy of consideration.

4. Observations on the phenomena of the operation of the tides on the coast line of the Colony might yield, in time, interesting data for calculating the periodicity or otherwise of their effects.

5. The natural apathy and timidity of the Indians renders it far from certain that their instrumentality can be turned to any useful account, in the collection and preparation of the products of the forests and rivers, but the experiment might be tried at the several mission stations, where only the right influences can be directly brought to bear upon them.

6. Oral instructions, by way of lectures, and printed instructions, might be addressed to wood-cutters and others, pointing out the proper times and most suitable methods of turning to account the subordinate products coming under their notice in the pursuit of their calling, for example, barks of trees useful for tanning, gums or resins, fibrous plants, &c., also explanatory of the simple machines and appliances necessary for such purposes.

7. An agency might be established in the ports of Georgetown and New Amsterdam for the purchase and shipment of all such products, and especially of cotton and other fibres grown in small quantities by the peasantry, so as to relieve the producer from risk and uncertainty in carrying on his operations, and such agency might be usefully extended to the great emporiums in other parts of the world, especially in Europe and North America, for the purpose of introducing to the notice of consumers the immense variety of acceptable products which the Colony could readily furnish.

8. Agricultural associations might be attempted with a reasonable prospect of success, if based upon sound principles.

9. A conviction of the importance of more accurate and detailed statistics of the population has become more general within the last few years. Questions of the deepest interest in regard to the condition of the people and the future of the Colony are involved in the making effectual provision for this purpose. Such records would perhaps not supersede the necessity for a decennial census, but they

would afford data for comparison with it by which the accuracy of each might be verified, and the chances of error materially diminished.

We now proceed to notice some of the principal articles contained in the collection and described in the catalogue:—

SECTION A.

SACCHARINE PRODUCTS AND ARTICLES OF FOOD.

SUGAR, Nos. 1 to 58.—The variety of sugar-cane, *Saccharum officinarum*, Lin., cultivated in this Colony is what is usually termed the “Tahiti Cane.”

The plan on which a sugar estate in this Colony is laid out is described in the first Report on Thorough Drainage by the late Dr. SHIER, agricultural chemist to the Colony, page 15:—

“The plantations, laid out for the most part by the Dutch, are on a uniform plan. They are generally narrow, rectangular strips of land, with a façade or water frontage on the coast, the rivers, or canals. The façade varies from 100 to 300 Rhymland rods.* Exceptional cases occur where, from an estate’s being prevented from extending far back, extra façade has been allowed, giving to the estate more of a square form.

“Every estate is bounded by four dams. The front-dam, excluding the sea, river, or canal; the back-dam, parallel to the former and excluding the bush water, which, in heavy weather, is very considerable, and would inundate the cultivation. The clay thrown out in forming the adjacent canals or trenches affords the material of which the dams are formed. Along each of the remaining sides there runs a dam from front to back. These are usually termed side-lines. They are common to two contiguous estates, and prevent the influx of water from the sides. Thus, the very long rectangular strip of land is surrounded with dams, which, when kept free from bush, answer the purpose of a road round the estate; but the produce is brought to the buildings (often situated in front) by canals. In fact, water transport of produce is universal.

“The arrangement of the navigation system is very simple. From front to back, and right in the centre of the estate, there runs a dam called the middle walk, with a canal on each side of it. These are termed centre canals, and are wide enough to admit of two punts

* The Rhymland rod is equal to 12·32 feet.

passing each other. The dam forms a path for the cattle that draw the punts. At regular and comparatively short intervals branch canals strike off at right angles from the centre canals, and proceed to within a rod of the draining or side-line trenches, which are parallel to the side dams before described, and adjacent to them. These branch canals thus constitute the transverse boundaries of the fields; and navigation canals thus lie on three sides of every field, and admit of canes being carried by a short path to the punts.

“On some estates there is only a single centre navigation canal. These canals are principally supplied by the rain, but in protracted droughts, and especially when they are shallow, they are liable to run short of water; hence, whenever access can be got to creek, lake, or bush water, it is brought from behind to supply the navigation system. In other instances salt water has to be taken in from the front when a cane crop cannot otherwise be got off the ground.

“The drainage of an estate is equally simple. From back to front and immediately adjacent to the side-line dams run the two main draining trenches, generally dug considerably deeper than the navigation canals. The small drains, again, cut at distances of 2 to 3 rods apart, commence within a bed of the middle-walk side of the field, and terminate in the side-line draining trenches, being dug with a fall in that direction. The small drains are thus at right angles with the main draining trenches. In the front dam the sluices or kokers are placed. Sometimes there is only one on an estate, but generally two, one at the end of each draining trench. The main draining trenches are generally connected together by a trench running along behind the front dam.

“There is no such thing as general drainage or combination among proprietors, unless it be that several adjacent estates sometimes unite to cut a common canal to some lake or creek from which fresh water can be obtained for navigation purposes. Up to the time of emancipation there were *company paths*, consisting of a dam and a trench, the one forming a path into the interior of the country, the other serving as an outlet seawards for bush water, when in rainy seasons it accumulated behind the back dams. These trenches or canals, however, from the lack of labour have, in most instances, been allowed to silt up, so that in an unusually wet season there is now greater pressure on the back-dams than formerly, and no compensation for the numerous small creeks which, when the land was in a state of nature, delivered the excess of water, but which were necessarily obliterated when the land was empoldered and reclaimed.

"The estates are often of great depth. The original grants extended backward 750 rods. No difficulty exists in obtaining the second grant or empolder of another 750 rods, and when the proprietor can show that two-thirds of the first and second empolders are in cultivation he may obtain a third empolder, and so on, a merely nominal ground rent, termed acre-money, having been formerly charged for all the empolders beyond the first, but by the most recent land regulations the price is fixed at £1 per acre. Estates that do not abut on other estates are limited by the expense and inconvenience of transport when the depths become extreme." *

"Some idea may be formed," observes MONTGOMERY MARTIN, "of the labour required in drainage, and the capital required to establish it, when it is stated that two hundred miles of drains, and thirty miles of *private* canals, twelve feet wide and five feet deep, are required for the drainage and transportation of the canes to the mill of an estate producing seven hundred hogsheads of sugar." Since the time this was written, however, the proportionate productive power of many estates has largely increased.

The implements in general use in the cultivation of the soil are confined to the shovel, the hoe, and the cutlass, thus rendering all operations of field culture dependent on human labour. Attempts have been frequently made to introduce the plough, and several instances might be adduced to show that under favourable circumstances it may be used with advantage. The great obstacle, however, to it, as well as to the use of many other agricultural implements, is the open drains. By the present system, surface drainage only can be effected, and to attain this, the open drains must be placed very near each other, so as to admit of the water running off rapidly from the surface. Hence it is only possible to plough in one direction, *viz.* parallel with the small drains. Neither can the plough be used very near the drains, for if so the sides are liable to be broken down, preventing the drainage water from passing on, or entailing the expense of removing all obstructions after the ploughing. Yet, in some cases, even this imperfect tillage has been found cheaper and more efficient than that by the shovel and hoe.

The steam-plough has within a few years been introduced, but it is only within a few months that it has been made use of on any estate. Some modification of the implement has been made by Mr. RUSSELL,

* This statement now requires some modification; acre money is still chargeable for wood cutting licences, and grants of land to be occupied for cultivation or other purposes. Land for absolute sale is exposed at an upset price of \$10 per acre.

of Plantation Leonora, by attaching wheels, whereby he has succeeded in ploughing, not merely parallel with the small drains, but also in cross ploughing, the wheels enabling the implement to pass over the small drains without shock. The steam-plough has also been set to work on another estate, *viz.* Plantation La Jalousie. In these operations nothing can prevent a certain amount of soil being carried into the open drains and rendering necessary the clearing of them out after the work is done. It is impossible at present to say whether this mode of culture can be effected at a cheaper rate than by the ordinary methods in use. One thing is obvious, *viz.* that the tillage by the steam-plough is incomparably more effective than by such manual labour as can be generally applied. The effort made to overcome difficulties and to render the steam-plough serviceable under peculiar circumstances, deserves approbation and encouragement. Under the present system of culture the average yield of sugar has of late years amounted to about two hogsheads per acre, while in some cases (in particular fields) as much as 8,000 lbs., or more than four hogsheads, have been obtained. The increase in the average yield per acre is mainly attributable to a greater command of labour ensuring better tillage and to the application of manures to old lands. The manures chiefly in use are sulphate of ammonia, guano, and superphosphates. Several planters have also directed their attention to the utilizing of cane ashes,* distillery lees, and other refuse as manures, which till lately were wasted, partly from the want of labour in applying them to the fields.

Within the last few years much attention has been paid to the subject of drainage. On various estates in different parts of the Colony, but especially on the east sea-coast of Demerara, powerful steam machinery has been erected for drainage purposes. The scoop-wheel, improved pumps, and centrifugal pumping machines are now in use. The advantages which estates derive from supplementing the deficiency of natural drainage, by lifting or pumping engines, are very apparent, and will doubtless ere long be followed by the adoption of a better system of agriculture. Several years ago an experiment on thorough drainage was instituted which demonstrated that even on our stiffest soils the principle of thorough drainage was perfectly applicable.† There can be little doubt that when the cultivation of the soil receives an equal share of attention to what has been bestowed on our best

* See Catalogue, C. 30.

† See Dr. Shier's First and Second Reports on Thorough Drainage, 1847 and 1850.

estates to the manufacture of sugar, the greatest improvement will be the introduction of thorough drainage, thus bringing within the power of the planter the attainment of efficient culture by cattle labour, with improved implements, and the employment of manures: it would also remove the chief impediments to the introduction of steam culture. Thus would our present high-priced, inefficient, and desultory labour give place to a steady, profitable, and completely manageable system. Perhaps one of the greatest advantages of this system would be its direct tendency to raise the field labourer in the scale of civilization.

The subjoined sketch of the mode of cultivating a sugar plantation is quoted from a publication entitled ‘Demerara after Fifteen Years of Freedom,’ by a Land Owner:—

“A sugar estate is divided into fields of from five to ten acres in extent by the cross-canals above mentioned, and the method of planting the cane is simple and easy when labour is at command. The brush-wood and grass having been cut down and weeded, are piled into rows, six to eight feet apart, across the intended beds into which the field is to be divided. These beds are formed by digging open small drains two feet wide and two feet deep at intervals of every thirty or thirty-six feet across the entire field, beginning within a few yards of the canal, in the centre of the estate, and running to the side-draining trenches into which they empty themselves. The soil from these small drains having been carefully thrown upon the beds, so as to raise and round them off in the middle, narrow banks or ridges of earth are made across them from drain to drain—parallel to and equi-distant between the rows of grass and brush-wood; and in these spaces, between the banks of earth and grass, the canes are planted in line, each line being three or four feet apart, and each cane-plant nine or ten inches from the next. The plants are procured by cutting off the tops or upper joints of growing canes into lengths of ten or twelve inches, which are thrust in a slanting direction into the well-stirred ground, and in ten days or so the long grass-like leaves begin to spring from the ‘eyes’ at every joint. These young canes require to be kept well weeded, and moulded about the roots from the ridges of earth or decaying grass on either side of them, which had been previously prepared for that purpose; and this must be repeated as long as there is room for the labourers to pass between the rows, which, according to the season, will be until the plants have attained the age of six or eight months, after which time the spreading of numerous

leaves from each stock will have covered the surface of the field with so dense a jungle, as in a great measure to prevent any further growth of weeds.

“When about nine months old, the cane throws out its ‘arrow,’ a long reed-like stem, surmounted with a tuft of waving downy blossom. At this period the plant is poor and weak, and little more than a mass of water; it soon, however, recovers, and in twelve or thirteen months from the time of planting is considered at maturity, having then, sometimes, attained a length of twenty to twenty-five feet, but more frequently of ten or twelve feet, about as thick as the wrist, and divided into joints like a bamboo. When ripe, the canes are cut down to the very ground, in lengths of three or four feet, and thrown into punts, which are towed along the canal by mules or oxen to the wet dock, at the door of the sugar-mill.

“Immediately after cutting, the large quantity of ‘trash’ or dry leaves is rolled clear of the cane stumps, and heaped in rows, there to decay and form a rich manure for the succeeding crop. In a few days the stumps throw out their shoots, and the same routine of cultivation is repeated for twelve months more, any vacant spaces where plants may have missed, being carefully supplied. The canes of the first year are called ‘plant canes,’ those of the second and subsequent years being distinguished as ‘ratoons;’ and these ratoons have been known to be produced from the first plant for twenty years and upwards, the canes having been annually cut down, and the stumps allowed to shoot again. But this continued reproduction from the same stocks, which is now compulsory on the planter from the scarcity of labour, of course causes the canes to degenerate, and to yield less abundantly. An acre of newly planted land will give two tons of sugar for the first year, gradually falling off to not more than one-fourth of that quantity as the stocks become old; and were there sufficient labour in the Colony to admit of the land being re-planted every third or fourth year, there can be little doubt that the present crops would be nearly doubled. The productive power of the greater part of the soil of British Guiana, indeed, appears to be unlimited. As an instance, it may be mentioned that, on an estate in Essequibo, the return obtained in 1851 from certain lands, which had been properly worked and perfectly drained, amounted to a fraction within four tons of sugar per acre.”

The processes employed in this Colony in the manufacture of sugar are the following:—

The cane-juice is received from the mill into cisterns or boxes, where such a proportion of lime * is added as is considered necessary for its proper defecation. It is thence run into a series of cast-iron vessels called "coppers," which are built into brick-work, and heated by the direct action of a single fire in the ordinary manner. In these the juice is, as far as possible, cleansed by means of skimming, and evaporated down until it has reached that degree of concentration technically known as the "striking point," when it is transferred into shallow wooden vessels, and allowed to crystallize. As an improvement upon this rude process, separate defecating vessels or clarifiers, heated either by steam or by the open fire, have been introduced on the majority of estates, and in some instances vessels in which the defecating liquor is allowed to subside previous to being run into the coppers, have also been used with advantage.

For upwards of thirty years vacuum-pans have been in use on some plantations in this Colony. Of late years their use has been greatly extended, and, from present appearances, it is likely that, at no distant date, no important estate in the Colony will be without one. The advantages attending the use of the vacuum-pan are chiefly these:—

1. A much more speedy manufacture of sugar than by the ordinary process.
2. The production of a sugar (grocer quality) which goes directly into consumption, without passing through the hands of the refiner.
3. The avoidance of all loss from drainage on the homeward voyage. The loss from drainage of molasses of common process sugars is estimated at 10 per cent. of the original weight.

On plantations where the vacuum-pan is used the process may be thus stated:—As the cane-juice falls from the mill rollers it is mixed with a certain proportion (half per cent.) of bisulphite of lime. It is then thrown up to the clarifiers, and boiled by means of steam. A due amount of milk of lime is added, and the contents of the clarifier allowed to remain at rest (half an hour) till the impurities have settled, when the clear juice is run down to the copper wall. In some cases filtration through bag-filters is practised as the juice leaves the

* For improved methods, see Dr. Shier's Report on the Clarification of Cane Juice, 1850.

clarifier. On some estates the contents of the clarifiers, at a boiling temperature, are run into subsiding vessels in which the sediment takes place, from which the juice passes either through bag-filters, or at once to the copper-wall. On the copper-wall the cane-juice is evaporated to a density of from 25 to 30 degrees of Beaumè's saccharometer, when it is either taken directly into the vacuum-pan, or is previously passed through bag-filters. When the syrup is sufficiently concentrated in the vacuum-pan, *i. e.* when crystals are formed to the satisfaction of the pan-boiler, the contents are run into shallow wooden coolers, and after a short time transferred in portions to the centrifugal machines, in which it is freed from molasses. In some cases, while in the centrifugal machines, syrup is used to brighten the colour, and in some cases a small quantity of water. The sugar is then removed from the centrifugal machines, and at once packed into hogsheads. The sugar thus manufactured in this Colony is of a pale straw colour, uniform crystal (not too large) of great brilliancy, and dry. A sugar perfectly white and brilliant could as easily be produced; but the action of the differential duties in England shuts the market against it.

From the various improvements introduced the manufacture of sugar is now a very speedy process; for instances are known where, from canes in the field in the morning, the sugar has been on ship-board before night.

It has been stated above that bisulphite of lime is used in the manufacture. This agent has been used for the last eight years, but at the present time much more extensively than ever. It is in some cases used even when the ordinary process is followed. There are now three establishments in or near Georgetown for the manufacture of bisulphite of lime, so great is the demand. The present price of the bisulphite is sixteen cents (8*d.*) per imperial gallon.

The apparatus for the manufacture of sugar is now wonderfully compact and perfect. The improvements likely to be made will, no doubt, be in the substitution of shallow evaporating vessels for the teaches at present in use.*

RUM, Nos. 59 to 94.—The quantity of rum manufactured in this

* The invention of the ordinary process of sugar manufacture, still in use in most of the French colonies, is attributed to Père Labat, a Dominican of considerable scientific attainments, who arrived in Martinique in 1693, and remained there for many years. The negroes in Martinique are said to believe that the ghost of the worthy Father, in the guise of a lambent flame, revisits at certain periods the localities for which in his lifetime he had a special attachment.—JUTSLAND.

Colony is very considerable. Formerly it was estimated that, for every hogshead of sugar produced by an estate, there should also be produced a puncheon of rum. This estimate still holds good on estates where the ordinary process of the manufacture of sugar is practised; but on estates where improved methods with the use of the vacuum-pan are followed, the quantity of rum does not exceed one-half of the old estimate. The great object of proprietors is to extract the largest amount of sugar from the cane-juice, and diminish as much as possible the production of rum and molasses.

The rum produced does not bring so high a price in the market as that of Jamaica, not that less skill is employed in its manufacture, for no expense has been spared to obtain the best machinery and make use of the best methods. The reason of the inferiority arises chiefly from two causes.

1. From the very impure cane-juice obtained from the sugar-cane grown in this Colony. So much salt still remains in the soil, that on many estates the presence of salt in the cane-juice can readily be perceived by the taste.
2. From being unable to employ water for condensing the spirit at a lower temperature than 84 deg. Fahr. In Jamaica the spring-water brought from the mountains is of a much lower temperature.

On the best estates till recently the whole of the molasses was manufactured into rum, but now a good many estates reboil the molasses in order to extract all the crystallizable sugar. This, however, can only be practised where the vacuum-pan is used.

Formerly the molasses was exported to Great Britain and purchased by refiners, but lately, a great deal has been sent to the United States, where a higher price has been obtained. It may also be stated that a considerable proportion of the sugar of the Colony has gone to the same market.

Rum when rectified is colourless, and possessed of a peculiar odour, arising, it is said, from an essential oil contained in the rind of the cane, and which finds its way, in the skimmings of the cane-juice, during its evaporation, into the sweets used in setting up liquor for fermentation. Rum is coloured in this Colony by caramel prepared from good muscovado sugar. "The proper manufacture of good colouring matter for rum is very important. For this purpose, the best sugar should be selected and placed in sufficient quantity in a pan on an independent fire. The sugar must be constantly stirred with a

wooden paddle during the action of the fire on the pan, in order to prevent its getting a singed taste or flavour, and when it comes to a consistency, making it difficult to keep it in motion with the paddle, the fire must be withdrawn, and high wines gradually added to it under the agitation of the paddle, until it comes to a consistency of thick cream, so that the whole will be perfectly dissolved. After this, it should be put into a cask placed on end, with two cocks, one about six inches from the bottom of the cask, the other about two inches from the bottom, and allowed to remain undisturbed, in order to its depositing the sediment left in it, until it runs off from the upper cock entirely free of sediment. It may then be used for colouring the rum, and about three pints of good colouring matter well concentrated ought to be sufficient for 100 gallons of spirit; but different markets require different shades of colour, and to regulate the shade of colour must be left to the judgment of the person entrusted therewith. Great care must always be taken that the colouring matter does not impart any cloudiness to the rum, because when rum is cloudy, the value of it is very greatly deteriorated. I would always recommend colouring matter to be made in large quantity, because the longer it is kept the purer it becomes.”* The strength of the rum generally exported from this Colony is about 35 per cent O.P.

RICE, Nos. 173 to 180.—Several experiments, on a considerable scale, have been made with the view of introducing rice as an article of cultivation in the Colony. The most important of these has been that conducted, in 1853, by Mr. A. V. COLVIN, on plantation *Vive-la-Force*, where about 70 acres of land, in second growth “bush,” were cleared, and planted with seed brought from the State of Georgia. The rice grew to great perfection, and was estimated to yield sixty bushels per acre; but, from damage sustained in the stacks, which were exposed to four months of rainy weather, while awaiting the arrival of a thrashing machine from the United States, the actual return of good rice fell far short of that quantity. Part of the rice in husk, or “*paddy*,” was shipped to London, and when dressed sold for 30s. per hundredweight, being 5s. higher than the price of ordinary Carolina at the time. The *paddy* shipped netted in Demerara \$1 10c. per bushel. Some of the crop was used in the Colony for feeding horses, being, when crushed, deemed equal to oats for that purpose, and at the then prices considerably cheaper. While a bushel of oats weighs from 40 lbs. to 45 lbs., a bushel of *paddy* weighs 54 lbs.

* MacRae's Planters' Manual.

At the Georgetown Exhibition, in 1854, a sample of rice from *De Kinderen* obtained the prize ; and its superiority would seem to have been derived from the circumstance that the water used in irrigating the crop was the muddy water of the Demerara River ; while other crops appear to have been dependent on the rain or bush water from the interior. Although these experiments have not been followed up by any systematic attempt to establish rice as a staple, in consequence of the starved condition of our labour market, they have demonstrated that even under ordinary circumstances as to the supply of water, and without any peculiar advantage of locality, one hundred bushels of *paddy* may be obtained annually, per acre, at a cost of \$40 ; a sum which includes the expense of preparing the land, of seed, of sowing, weeding, reaping, and thrashing, all the work being done by manual labour. But when a command of water can be obtained, a much larger return may be expected ; and if cattle labour were applied to the stirring and levelling of the land, and machinery used for thrashing and husking the grain, the expenses would be materially reduced. It has also been established by the *De Kinderen* experiment that water, slightly brackish, may be used successfully in the cultivation of rice.

Of late, rice has been cultivated in several districts of the Colony to a small extent by the immigrants from India, and it is likely that others will follow the example. It is also cultivated by the inhabitants of the Chinese village in the Waratilla Creek, and it is said that it will form their chief staple of cultivation.* It is to be hoped that at no distant date a sufficiency of rice may be produced for meeting the consumption of that article which forms so great a portion of the food of the immigrants.

The subjoined observations on the culture of rice in this Colony, extracted from a paper communicated by Mr. COLVIN, will probably be found interesting :—

“The best site for a rice plantation would be where the river-water could be used for irrigating purposes, as the warm river-water, with a little mixture of brackish sediment, would be far better than the cold poor bush-water.

“To prepare land for rice requires much the same process as for any other plant ; dig your small drains deep, and round up your beds slightly but not too much, *or they will not be covered evenly with water when you put it on* ; plough your land and harrow it level, then sow your seed *broad cast* ; one bushel and a half or two bushels of seed will sow an acre of land, then brush it over with a light harrow, and

* See p. xxii.

then admit the water, covering the whole surface about three or four inches deep ; this is called the *sprout flow* ; four days will be sufficient for this water to be held, draw it off, and you will now see the effect of your deep drains, the surface will dry almost immediately, and on looking very closely you will see thousands of points just coming through ; this is called by rice planters ‘in the needle :’ water it carefully and daily, and as soon as it begins to unfold the leaf, put on the water again, just barely covering it, and hold it three or four days, *not more*, as rice will not stand the water here so well as where the climate is cool, and the land from having been exposed to a cold winter, requires a covering of water to keep off the cold winds : turn off the water and let the land remain dry till your plants have attained a good stout appearance. Now put on the water the third time, and leave the tops just barely out of the water, keep the water there and stretch it up ; this we call the *stretch flow*, and it will make the rice grow tall and kill all the grass that is covered with the water ; at the next spring-tides turn off this water, open all your kokers, let the tide run in and out at pleasure to wash out your trenches, drains, &c., and then close your kokers, keeping in as much water as the rice will bear, that is *not to cover it* ; the rice will now grow up rapidly, and at every spring tide you must make an entire change, adding water as much as you can, till you have two feet deep of water, if you can get so much. When the rice is in *belly* (a term used by rice planters), if the tides are good, draw off the water for a day or two to give the roots air ; when the ear is forming, and before it bursts out, wash out your trenches and hold the water carefully, so as not to waste, till the crop is ready for the harvest, which will be in four months from the day of planting or thereabouts.

“Now draw off the water, and put in a reaping machine worked by two mules or horses, and two men will cut twenty acres per day ; have it tied up in sheaves and put in shock the same as wheat ; then if you wish to thrash your rice in the field, have a thrashing machine placed on a convenient spot under a *troolie** shed ; thrash your rice with the same animals you cut it with, and winnow with a winnowing machine, put it in bags and bring it to the buildings, where you can stamp it by a wind-mill. If you prefer bringing it home in the straw, have your punts the same as for canes, and all can be done at the buildings. As early as possible after harvest start your ploughs and turn the stubble under, before the grass and weeds spring up to

* *Mancaria saccifera* : produces leaves thirty feet long by three broad, which are used for thatching.

interfere, and so you may continue to plant and reap till two or three crops are made in the year. I have repeatedly made two, and think this quite enough, as it would not answer to be harvesting in the heavy rainy season. Fifty bushels of rough rice or paddy I find the average yield per acre, though I have made more, and quite equal to the Carolina rice if properly watered and attended to in the way directed herein."

That the lands of the interior are also peculiarly suitable for the production of rice is shown by the following remark of Sir R. SCHOMBURGK :—

"There is a tract between the Rivers Berbice and Essequibo, in 4 deg. 20 min. N. latitude, which nature itself appears to have designed for the growth of that article. It possesses the means of constant irrigation, and at the first subsiding of the periodical inundations, when the soil is left like soft mud, the seed might be put in. The banks of the River Berbice are here so low that irrigation might be easily procured even in times of great drought. I am fully persuaded that two crops of rice might be produced annually; indeed, it is on record that a Mr. BIELSTEIN, who cultivated this article on a small scale at the lower Essequibo, raised repeatedly three crops in a year. The cultivation of rice would thus cover thousands of acres which are at present a perfect wilderness; and food for the lower classes would be provided, which at present is mostly imported from a foreign country."

COFFEE, Nos. 181 to 186.—The quantity of coffee, the produce of British Guiana, exported in 1830, was 9,472,756 lbs.; in 1840, 3,357,300 lbs.; and in 1849, 100,500 lbs.: since which it has almost ceased to be exported, scarcely sufficient being produced to supply the demand of the Colony. In alluding to this once important export, Sir R. SCHOMBURGK makes the following observations :—

"Coffee was, for a length of time, almost the only staple of Berbice and Demerara; it has since been much neglected, the cultivation of sugar being substituted for it. The consumption in the United Kingdom amounted in 1831 to 9,865 tons, or upwards of twenty-two millions of pounds. Its cultivation must, therefore, be an object of great interest to the Colony. At present it is restricted to the coast regions, where the soil is very rich, and the trees are often luxuriant without ensuring fruit of a good quality; the most favourable situation is undoubtedly the side of the hill, where soil is springy. There is,

perhaps, in British Guiana, no tract better qualified for the cultivation of that bean than the central ridge of mountains. If an increased population should permit the interior to be cultivated, this tract would produce coffee equal in quality to that from Jamaica and Martinique, which is considered the best in the West Indies, and would soon surpass Jamaica in quantity of export, though it is estimated at 20,000,000 lbs. The outlay of capital for the establishment of a coffee plantation being small, this circumstance would offer greater inducements to settlers; and if in the selection of the soil and situation some care were bestowed, I see no reason why it should not equal the Mocha bean."

"For the cultivation of coffee, it is first necessary to establish a nursery of young plants by sowing the seeds. At the age of some six months these may be transplanted into your already drained field, in squares of eight to nine feet apart. Beyond keeping the field clean weeded, and giving the plants a slight moulding, and keeping them free of water sprouts, they do not require any other attention for the first three years. At the expiry of this time they commence to bear fruit, which, when ripe, assumes the appearance of a small cherry. In each of these cherries is contained two coffee beans; and the coffee is cured or dried either by drying the entire fruit in the sun, or by passing the fruit through what is called a pulping mill, which separates the outer pulp or covering from the beans. The beans are then subjected to a washing in a tank full of water, in order to free them of the glutinous substance which adheres to them; this causes them to cure or dry more rapidly. They are then left in what is called the parchment husk, and exposed to the action of the sun on tiled drogheries or platforms laid with tiles, until they are perfectly dried; and from this they are, during crop time, spread on the wooden floors of a building called a Logie, to the depth, in a heavy crop, of 12 to 18 inches. Whilst thus spread, great attention is necessary to prevent the coffee getting heated and its colour destroyed, by constantly turning it up, and by the use of some dry lime or ashes sprinkled over it. After this, the beans are subjected to the operation of what is called a stamping mill, which separates the parchment husk from the beans. This stamping mill is merely two large solid wheels fixed on each end of a beam on an axle, and worked by mules moving round in a circle—the wooden wheels working in a circular trough filled with the coffee beans. After this the whole is submitted to the action of a winnowing machine, which separates the chaff from the beans, and subsequently the beans are passed through copper sieves to

separate the whole from the broken coffee, and finally hand-picked, and put in bags or casks for shipment.

“After the coffee-tree comes into bearing it merely requires to be kept clean and free of grass and weeds, to be kept clear of water-sprouts and cross-branches, and to be kept trimmed to a height of about five feet. The coffee plant strikes a deep tap-root, and deep drainage is essential to its fruitfulness.” *

BANANA, No. 169, AND PLANTAIN, No. 168.—“The cultivation of Plantains is a very simple process; the land, after being drained, being merely prepared for the reception of the plants by digging holes about 18 to 20 inches deep, in squares of 9 to 12 feet apart, for the reception of the plants. The plants consist of the root of the plantain tree with some two feet of the stem. After the plants are placed in these holes vertically, stem even with the surface, they ought to be tightly rammed all round with earth, so as to prevent water lodging round and rotting them. They generally produce from five to ten suckers, the most forward of which will bear in nine months from the period of planting in rich land; in a poorer soil they will take twelve months to come to maturity. Plantains, to be produced in perfection, require a rich soil; and in such I have known bunches to be cut weighing as much as 80 lbs., with stem, skins, &c.; perhaps about one-half of that weight would be fit for food, of a very nutritive quality.

“When it is considered that each plant, from its suckers, will probably produce an average of four branches of plantains per annum, it will be seen how valuable it is as an article of food, and that in this Colony it is justly termed the staff of life.” *

The following account of plantain meal is taken from the report of Dr. SHIER on the starch-producing plants of the Colony of British Guiana, 1847 :—

“The plantain has frequently been suggested as an article of export. In its ripe state no unexceptionable and sufficiently cheap method of preserving it has yet been suggested. It is sometimes so abundant and cheap that it might, if cut and dried in its green state, be exported with advantage. It is in this unripe state that it is so largely used by the peasantry of this Colony as an article of food. It has always been believed to be highly nutritive; but I have not found in any sample of the dried plantain which I have analysed a

* MacRae's Planters' Manual.

larger amount than .81 per cent. of nitrogen, which, as has been already stated, corresponds with about $5\frac{1}{2}$ per cent. of proteine compounds. When dried and reduced to the state of meal, it cannot, like wheat flour, be manufactured into maccaroni or vermicelli, or, at least, the maccaroni made from it falls to powder when put into hot water. The fresh plantain, however, when boiled whole, forms a pretty dense firm mass of greater consistency and toughness than the potato. This mass, beaten in a mortar, constitutes the *foo-foo* of the negroes. The plantain meal cannot be got into this state unless by mixing it up with water to form a stiff dough, and then boiling it in shapes or bound in cloths. Plantain meal is prepared by stripping off the husk of the plantain, slicing the core, and drying it in the sun. When thoroughly dry it is powdered and sifted. It is known among the creoles of the Colony under the name of *conquin-tay*. It has a fragrant odour, acquired in drying, somewhat resembling fresh hay or tea. It is largely employed as the food of infants and invalids. As food for children and convalescents it would probably be much esteemed in Europe, and it deserves a trial on account of its fragrance, and its being exceedingly easy of digestion. In respect to nutritiveness, it deserves a preference over all the pure starches, on account of the proteine compounds it contains. The Plantain meal would probably be best and freshest were the sliced and dried plantain cores exported, leaving the grinding and sifting to be done in Europe. The flavour of the meal depends a good deal on the rapidity with which the slices are dried; hence the operation is only fitted for dry weather, unless, indeed, when there was occasion for it, recourse were had to a kiln or stove. Above all, the plantain must not be allowed to approach too closely to yellowness or ripeness, otherwise it becomes impossible to dry it. The colour of the meal is injured when steel knives are used in husking or slicing, but silver or nickel blades do not injure the colour. On the large scale a machine, on the principle of the turnip-slicing machine, could be employed. The husking could also be greatly facilitated by a very simple machine. Were the plantain meal to come into use in England, and bear a price in any way approaching to that of the Bermuda arrowroot,* it would become an extensive and very profitable export. Full-sized and well-filled bunches give 60 per cent. of core to 40 of husk and top-stem; but in general it would be found that the core did not much exceed 50 per cent., and the fresh core will yield 40 per cent. of dry meal, so

* Arrowroot. *Aroo*—starch; *Aroo-aroo*, “starch of starch;” hence probably “arrowroot.”—*Hillhouse*.

that from 20 to 25 per cent. of meal is obtained from the plantain; or 5 lbs. from an average bunch of 25 lbs.; and an acre of plantain-walk of average quality, producing during the year 450 such bunches, would yield a ton and 10 lbs. of meal, which, at the price of arrowroot—namely, 1s. per lb., would be a gross return of 112*l.* 10*s.* per acre. A new plantain-walk would give twice as much. Even supposing the meal not to command over half the price of arrowroot, it would still form an excellent outlet for plantains whenever, from any cause, the price in the Colony sank unusually low.”

When the plantain is ripe, the green colour of the rind becomes yellow. Then a great part of the starch contained in the fruit has been converted into grape-sugar. In this state it is eaten as a dessert fruit. It was supposed by the Society of Arts that the dried yellow plantain might come into competition with figs, and the sample exhibited at the Great London Exhibition of 1851, which had been prepared in Mexico many years before, proved the great superiority of the *Plantano pasado* over figs in keeping properties, and in immunity from insect ravages. In Mexico, the simple exposure of perfectly ripe plantains or bananas to the sun’s rays is sufficient to prepare them for the market in an exportable form, as may be seen by the “*Method of Drying the Plantain*,” described by Mr. PERCY W. DOYLE in a communication to the Earl of MALMESBURY, and a copy of which was transmitted to this Colony on 2nd August, 1852, by Sir JOHN PAKINGTON. But whether from the greater moisture of this climate, or a greater proportion of nitrogenous elements in our plantains and bananas, it is found in practice that, here, simple solar exposure is not adequate to the preparation of this dried fruit. There are three modes, however, by which the object can be attained:—

- 1st. By exposing the fully ripe fruit to an atmosphere of sulphurous acid gas, previous to the drying process being commenced.
- 2nd. By a hasty boil of the fully ripe fruit in water containing sulphate of lime (hard water); and
- 3rd. By a similar parboil in syrup.

By either of these processes the albumen and caseine of the fruit become sufficiently coagulated, and the tendency to fermentation and decay is arrested till the proper dryness is obtained. Without this preliminary process the ripe fruit is found to deliquesce instead of dry in this climate. The second process is found, after experiment, to be the easiest and cheapest.

Whether they are to be dried with or without the rind should be determined before they have undergone the parboiling. There is some nicety required in knowing the best degree of ripeness of the fruit. It should be full and beginning to turn yellow before the plantain tree is cut down and the bunch gathered. The fruit, then, should be kept either on the stalk, or separated in a close dry place as recommended in the Mexican plan, till the yellow of the rind has become black at the ends, with large spots over the surface; till on some of those black spots "*blue mould*" has begun to appear, and swarms of small grey flies hover over the heap, attracted no doubt by the saccharine odour; and till the fruit yields to a slight pressure of the finger, and is somewhat supple in the hand. At this time, if some of the rind be removed, portions of the opaque yellow surface will appear as if melting. There should be no delay then in parboiling, or the fruit will be lost. If, on the other hand, the drying process is commenced too soon, a portion of the starch is still unconverted, and the dried fruit will be hard and want sweetness. This condition is easily discovered after the drying is completed, by the absence of a due amount of *shrinkage* in the fruit. Where the full ripening of the fruit, which seldom happens, is unequal, a slight bruise by pressure of the finger and thumb on those that are backward will accelerate the maturation by rupturing the intercellular tissue. Before the fruit is consigned to the boiling caldron, useless or rotten parts may be trimmed off both ends of the fruit, if the rind be retained. If, however, in any case the apex of the core requires to be removed on account of rottenness, that individual fruit should be rejected, for in the drying the gum and grape sugar will escape from its centre in clear amber-coloured drops. To spread the parboiled fruit in the sunshine, the bamboo frame used in Mexico, or a net, or any other contrivance by which the sun and air can play on them, is suitable. They must be removed to shelter on the approach of rain or evening dews. In rainy weather the heat of an oven is requisite, but the oven should be left open at the mouth, else the fruit will be baked instead of dried, and the heat should be comfortably bearable by the hand, else the grape sugar will be carmelized, and the core of the fruit blackened and rendered bitterish. Tight close packing, in drums under considerable pressure, as with figs, would no doubt contribute materially to the preservation of dried ripe plantains and bananas.

The following information regarding the banana is extracted from the Library of Entertaining Knowledge—"Timber, Trees, Fruits,"

page 366 :—" Eight or nine months after the sucker has been planted, the banana begins to form its clusters ; and the fruit may be collected in the tenth or eleventh month. When the stock is cut, the fruit of which has ripened, a sprout is put forth, which again bears fruit in three months. The whole labour of cultivation which is required for a plantation of bananas, is to cut the stalks laden with the ripe fruit, and to give the plants a slight nourishment once or twice a year by digging round the roots. A spot of little more than a thousand square feet will contain from thirty to forty banana plants. A cluster of bananas produced on a single plant often contains from one hundred and sixty to one hundred and eighty fruits, and weighs from 70 to 80 lbs. But reckoning the weight of a cluster only at 40 lbs., such a plantation would produce more than 4,000 lbs. of nutritive substance. HUMBOLDT calculates that as 33 lbs. of wheat and 99 lbs. of potatoes require the same space as that in which 4,000 lbs. of bananas are grown, the produce of bananas is, consequently, to that of wheat as 133 to 1, and to that of potatoes as 44 to 1. The banana ripened in the hothouses of Europe has an insipid taste, but yet the natives of both Indies, to many of whom it supplies their principal food, eat it with avidity, and are satisfied with the nourishment it affords. This fruit is a very sugary substance ; and in warm countries the natives find such fruit not only satisfying for the moment, but nutritive. Yet weight for weight, the nutritive matter cannot at all be compared with that of wheat, or even of potatoes. At the same time a much greater number of individuals may be supported upon the produce of a piece of ground planted with bananas, compared with a piece of the same size in Europe growing wheat. HUMBOLDT estimates the proportion as twenty-five to one ; and he illustrates the fact by remarking that a European newly arrived in the torrid zone is struck with nothing so much as the extreme smallness of the spots under cultivation round a cabin which contains a numerous family of Indians."

It may be proper to notice here, that the banana is cultivated in this Colony but to a very limited extent, and is solely used as a fruit in its ripe state. The plantain, on the other hand, is extensively cultivated, and in its unripe state is the staple and favourite food of the Creole and African population of the Colony.

STARCH, Nos. 95 to 130.—The sources from which starch may be obtained are numerous. Many trees produce seeds containing it in considerable quantity, such as the Mora. Many fruits which in their

ripe state abound in grape sugar, yield starch in their unripe state, such as the Mango, Plantain, &c. But it is from various roots and corms that it is obtained in the greatest abundance, such as bitter and sweet cassava, sweet potato, arrow-root, tous-les-mois, tannia, yams of different kinds, &c. These roots are almost all of them in extensive use in their fresh state as articles of food. For domestic purposes, starch is made in this Colony from the arrow-root, there existing a prejudice against the cassava starch, as it is said to rot the articles of clothing to which it may be applied. This may be true of that obtained from bitter cassava, especially if it has not been thoroughly washed in the preparation, as that root contains a juice of a very acrid and poisonous nature.

In the following table will be found the per centage of starch obtained from the fresh roots.*—

Names of Plants.	Percentage of Starch.	Names of Plants.	Percentage of Starch.
Sweet Cassava	26.92	Guinea Yam	17.03
Bitter Cassava	24.84	Plantain	16.99
Common Yam	24.47	Sweet Potato	16.31
Arrowroot	21.43	Buck Yam	16.07
Tannia	17.05		

When a given weight of each sort of starch is boiled in an equal quantity of water, and allowed to cool, jellies are formed, but of very different degrees of tenacity. In the following table are given the weights necessary to break such jellies : —

Names of Starches.	Weight in grains required to break the Jelly.	Names of Starches	Weight in grains required to break the Jelly.
Tous-les-Mois, commercial	1742	Arrowroot	333
Tannia	630	Sweet Potato	368
Common Yam	617	Buck Yam	151
Guinea Yam	571	Bitter Cassava	150
Plantain	467	Sweet Cassava	78

It may be inferred, when used as an article of diet, that that starch will be most economical which produces a jelly of suitable consistency from the smallest amount of the dry material. The translucency of the jellies, however, is almost in the inverse order of their tenacity. It may, therefore, be inferred that the cassava starches, which stand at the top of the list for translucency, might be advantageously employed for glazing calicoes, &c.

The starch globule varies very much in size and form in the

* Dr. Shier's Report on the Starch-producing Plants of the Colony.

starches obtained from different plants. A few examples are given in the subjoined table :—

Names of Plants.	SIZE OF GLOBULES.			Form, &c., of Globules.
	Range.		General Size.	
	From of an inch.	To of an inch.		
Tous-les-Mois	1 300	1 2000	1 500	Large, elliptical, and ovate, remarkably transparent.
Buck Yam	1 600	1 2000	1 800	Elliptical, often truncated at one end so as to be mullar shaped; some pear-shaped. Length twice the width.
Common Yam	1 700	1 2000	1 1000	Elliptical, some long-elliptical.
Guinea Yam	1 700	1 2000	1 1000	Larger globules elliptical, smaller globules spherical, often truncated, some shortly ovate, with the appearance of being flattened.
Plantain	1 400	1 1400	1 800	Globules long and narrow, generally long elliptical, often more acute at the ends than in any other species, some linear ending abruptly; length often 3 times the width.
Sweet Potato	1 1000	1 4000	1 2400	Spherical, aggregated.
Arrowroot	1 800	1 2400	1 1400	Ovate and elliptical, length in the larger globules twice the width.
Bitter Cassava	1 2000	1 8000	1 4000	A few globules occur as large as the one-thousandth of an inch. These are ovate, the rest are spherical.
Sweet Cassava . . . . .	.....	.....	.....	Same as former.
Tannia	1 2000	1 8000	1 4000	Not so truly spherical as the former.

The starch from the plantain (unripe fruit) cannot be advantageously manufactured, in consequence of being associated with a colouring matter from which it is almost impossible to separate it. This colouring matter resists the action of the most powerful bleaching re-agents.

The "Tous-les-mois," or "Buck Shot," a species of *Canna*, is little cultivated in this Colony. The plant, however, grows wild, and although in that state the corms are small, yielding but a small quantity of starch, the globules of which are smaller than in the Bermuda

Tous-les-mois, yet it was ascertained several years ago by the late Mr. T. M. POLLARD, of Plantation *Glasgow*, that by cultivation the corms increased much in size, yielding a much greater return of starch, and that in the third generation the starch globule had attained as great a size as that of the best commercial Tous-les-mois starch imported into the Colony. The plants in Mr. POLLARD's experiments were propagated by suckers, and the flowering stems were carefully eradicated. There can be little doubt that several starch-producing plants might be much improved by judicious culture.

The suitability of this Colony for producing starch is apparent when it is stated that two, even three, and in a few instances, four crops of roots could be produced annually. On this subject, see Dr. SHIER's Report on the Starch-producing plants of the Colony above referred to.

CASSAVA, NOS. 164 AND 165; AND CASSAREEP, No. 170.—The following is also taken from the Report of Dr. SHIER on the Starch-producing plants of the Colony :—

“It may soon become an important question whether some of the edible roots grown in the tropics might not be sent to Europe in a fresh state as a substitute for the potato. Many of them, the Buck Yam and the Cassava for instance, ought to be used when fresh dug; for every day they are out of the ground they deteriorate. This, however, is not so much the case with some of the larger Yams. It is worth trying whether the finer sorts, that deteriorate by keeping, might not, after being sliced and dried in the sun, become articles of export, either in that state or when ground to meal. For this purpose the Bitter Cassava, the Plantain, and the Buck Yam, are the most promising. Of the Bitter Cassava mention has already been made as a substance from which Starch and *Cassareep* might be prepared. In this case, however, the woody and cellular tissue, with the small quantity of starch left in it by the ordinary starch process, would form far too poor an article of diet to constitute part of the food of man. But the roots might be used as an article from which to prepare cassava-meal, *cassareep*, and the very small quantity of starch which is expressed along with the juice, leaving all the rest of the starch to form part of the meal. It is of such meal that the cassava cakes of the Indians are prepared, and although by no means so nutritive as Indian-corn meal,* there can be little doubt that in the Scotch and

* I have determined the amount of nitrogen contained in the meal made from whole maize, the growth of the Colony, as also from plantain-meal; I have also

Irish markets the cassava-meal would obtain a preference ; and were it exported in quantity it would probably come into extensive use among all classes. The process would be as follows :—After washing in a revolving apparatus, by which means the adherent earth would be got quit of, and almost the whole of the thin dark-coloured cuticle would become detached, the roots would be reduced to pulp in a rasping-mill without the use of water ; the pulp would be compressed in bags by hydraulic pressure, whereby the juice, together with a small portion of the starch would be expressed. After allowing the starch to subside, the juice would be concentrated to about the density of 1·4. The starch would be washed, purified, and dried. The contents of the bag would then be broken up and dried in the sun or in a current of air, after which the meal would be sifted through a coarse sieve to separate the coarser parts, which if their amount was considerable, could be ground and added to the rest. In this state of rough meal it is fit for making the cassava cakes.* If ground to flour it might be used to mix with wheat, rye, or barley-flour. If an acre of well-tilled, thorough-drained land yield 10 tons of fresh roots, and I have every reason to believe that such a return might be obtained, I have ascertained that the produce would be 3½ tons of meal, 593 lbs. of *cassareep*, and 2 cwt. of starch ; and estimating the meal at 1*d.* per lb., the *cassareep* at 1*s.* 5*d.* per lb., and the starch at 40*s.* per cwt., the

ascertained its amount in cassava meal, prepared in the manner mentioned in the text, and in meal prepared from the cassava sliced, dried, and ground without expressing the juice. Assuming LIEBIG's Formula of Proteine, namely $C_{48}N_6H_{36}O_4$, the result stands thus :—

			Nitrogen.			Proteine Compounds.
			Per cent.			Per cent.
Maize-meal (unhusked)	..	..	1·73	..	..	10·72
Plantain-meal	..	..	·88	..	..	5·45
Cassava-meal (juice expressed)	..	..	·36	..	..	2·23
Ditto from the sliced and dried roots			·78	..	..	4·83

* The process is usually conducted as follows :—The squeezed pulp is broken up, sifted, and exposed to the sun on trays or mats, till it is fully more than half dry. An iron hoop of the size and thickness of the cake to be made is then laid on a girdle or hot plate, and the space within the hoop is filled evenly with the somewhat moist meal, no previous kneading or rolling having been employed. As soon as the coarse meal coheres, the ring is lifted, and the cake is turned and heated on the opposite side. The heat should not be sufficient to brown the cake. The cakes are finally dried by exposure to the sun. From the dry cassava-meal cakes may be prepared by sprinkling it with as much cold water as to moisten it to the proper point, and then proceeding as above. Hot water cannot be employed, neither can kneading nor any considerable degree of compression be used, otherwise the water does not evaporate readily enough, the starch gets too much altered by the heat, and the cake becomes tough.

gross amount would be 78*l.* 13*s.* 4*d.* per acre. In ascertaining these proportions, very simple machinery was employed, and had the pulp been better pressed, the quantity of *cassareep* would have been considerably greater. From the table given in a former note it will be seen that the cassava-meal prepared in this way contains but a very small proportion of matter nutritive in the sense of contributing to the formation of blood, and that the expressed juice carries off fully one-half of the proteine compounds contained in the plant. But cassava might be sliced, dried in the sun, and sent to Europe in that state. In this case it would be the sweet variety that would be employed. In dry weather the process succeeds remarkably well, and the dried slices keep well. I have ascertained that when these sliced and dried roots are first steeped and then boiled, they return to very nearly their original condition, and make an excellent substitute for the potato."

SECTION B.

FIBROUS SUBSTANCES.

COTTON, Nos. 8 to 14.—Up to the year 1820 Cotton was the principal export of this Colony. In 1803 the Counties of Demerara and Essequibo shipped 46,435 bales, of an average weight of 300 pounds each. After the American war the enormous increase of that crop in the northern continent, together with the lowering of the duties on Foreign Cotton, without a corresponding decrease in the duties on Foreign Sugar, placed Cotton in so unfavourable a position with regard to Sugar, that between the years 1819 and 1823 more than two-thirds of the hands employed in cultivating the one were transferred to the other; and this is easily accounted for by the following list of prices:—In 1817 cotton was worth 20*d.* per pound; in 1819, 13¼*d.*; in 1820, 11½*d.*; in 1821, 8½*d.*; at which price it ceased to be remunerative in comparison with coffee and sugar, which were then highly protected, and from that date the extent of land in cotton cultivation gradually diminished, until for some years the Colony ceased to export a single bale.

In 1863, on account of the rise in price occasioned by the war in the United States of North America, an impulse was given to the cultivation of cotton in this Colony, and several proprietors entered into the speculation, but it was manifest that so soon as the prices of cotton

in the English market should fall below a certain price, the continuation of production would cease on account of the high price of labour. This result has taken place, and it is only in a few localities that the cultivation is still continued, the present price of cotton, 1s. 6d. per pound, yielding but a very small profit to the grower. Under the present circumstances the extension of cotton cultivation cannot be looked for unless the finest varieties of cotton were cultivated, and even these improved on.

Sir ROBERT SCHOMBURGK makes the following observations on the subject of the cultivation of cotton:—"The indigenous cottons are very numerous, and the Indian has generally a few shrubs of that useful plant around his hut. However, I have seen the industrious Macusi cultivating it more extensively. The Hammocks which the Indians manufacture of it are valued for their strength and durability, and are considered superior to the European article. Like the staples before enumerated, cotton has been only cultivated by the colonists in the coast regions; but its cultivation has, in a great measure, been abandoned because our cottons, raised by free labour and in a British Colony, were undersold by those produced by slavery in the United States. If, with regard to the abundance and cheapness of labour, British Guiana were put on the same footing as the Slave States in America, an inexhaustible supply of cotton of every description might be produced. There is no doubt that all kinds of cotton, from the best long staple down to the finest short staple, might be cultivated in the Colony, as the kind which does not thrive in one soil or climate might be produced in another. An extent of sea-coast of two hundred and eighty miles, from the River Corentyne to the mouth of the Orinoco, would produce cotton vying with the best in the world. I doubt the opinion that the finest cotton will not grow at a greater distance than twenty miles from the sea. I have sent samples of the wild cotton from the interior to the Colony, which were admired by competent judges for their fine long staple and silky appearance. No care whatever had been bestowed upon the cultivation of these plants, which grew at a distance of four hundred miles from the coast. Although the growth of the plant was not luxuriant, it was covered abundantly with cotton of the most excellent quality; indeed, it would be highly advisable for the cotton growers on the coast to exchange seeds."

The Committee avail themselves of the opportunity to quote the subjoined account of cotton cultivation in this Colony, as contributed by their esteemed colleague, Mr. J. BRUMELL, to the pamphlet entitled

‘Free Cotton,’ published in London, by Sir W. H. HOLMES, in 1862:—

“I need not trouble the reader with any attempt at a scientific disquisition on the ‘*Gossypium*,’ as botanists call the cotton plant. Its varieties are many, differing from each other in the length of the wool or staple, and in the appearance of the seed. My opinion is, that much, if not everything, in the production of good cotton, depends on suitable soil and climate. You may plant the finest long staple black-seed Sea-Island cotton; but if the soil and climate are not favourable, it will gradually degenerate into a short-wooled green-seed variety; so that, although cotton grows all over the globe, along that very extensive belt which reaches from forty degrees north to forty degrees south of the equator, it by no means follows that every place within those latitudes will produce a good article. Sea air, salt lands, and a combination of heat and moisture, seem absolutely requisite to form a good cotton-growing country. All these qualifications Demerara possesses in a remarkable degree, and her cotton ranked only second to the sea-island variety, and was of so rare and valuable a description, that it was scarcely ever spun alone, but was mixed up with the inferior short staple cottons of India and other countries, to give them body or length of fibre.

“As a practical account of the operations on a cotton estate may be useful, and not altogether uninteresting, I will tell you how we grew it in Demarara five-and-twenty years ago. Our lands, like those of most other estates in the Colony, are perfectly flat, and about a couple of feet below high water-mark of the Atlantic, by which they are bordered, and against which they are of course embanked. When a new field of cotton was to be planted, it was customary to ‘warp,’ or to put the land under sea-water, which could be done in a few minutes, by making a small cut in the sea-dam, or by opening the sluices as the tide rose. After a time, as soon as the rich alluvial deposit with which our sea-water is charged, had settled down on the land, the water was allowed to run off, and another supply taken in. This was repeated occasionally; so that, at the end of three or four months, when the water was finally drawn off, not only were all the weeds and underwood destroyed, but there was a fine rich loam left on the land to the depth of two or three inches, and fit to grow anything.

“The drains and water-courses having been cleared out, the next thing was to sow the seed. This was usually done early in April,

so as to get the showers of that month on the young plants, and to have them sufficiently strong to bear the rains in June. The way we planted was this :—A piece of rope, about one hundred feet long, was laid down at one end of the field ; along this rope, at regular distances of six feet, small bits of coloured rag were tied, and at each piece of rag stood a woman with her apron full of cotton-seed, and armed with a hoe. Two men then each took an end of the rope, and stretching it across the field, marched forward exactly six feet, and stopped, when the women, each opposite her own rag, made one dig at the ground with her hoe, dropped in about a dozen seeds, and lightly covered them over. The two men went on with their line six feet further, the women followed—and so they planted away till the field was completed—the result being, that when the plants came up, they were six feet apart from each other either way, and as regularly and beautifully set as if they had been put in by rule and square. They grew very fast, and in about three weeks or a month were five or six inches high, and thickly clustered together, as nearly every seed had come up.

“The women then went back again and ‘singled’ the young plants—that is, they pulled up and threw away all except two or three of the strongest-looking. In another month these were twelve to eighteen inches high, when the singling process was repeated ; but this time only one plant was allowed to remain in the spot where it was first planted. They were carefully moulded up and kept clear of weeds, and all bottom shoots or ‘water sprouts’ were broken off till the end of July, when the shrubs being about five feet high, became covered with bright yellow blossoms, not unlike those of the hollyhock. After this, it was not allowable to go through the fields for any purpose, as the buds and blossoms might be broken off. The cotton flower soon faded and was succeeded by the pod or fruit, about the size of a small apricot, and somewhat pointed in shape. By the middle of September the fine dry weather had ripened these, and the shell burst into three parts, from which hung the white wool. This it was necessary to gather at once, before even a shower had wet it, or before the wind had blown it out, and scattered it over the ground. This ‘blow of cotton,’ which was called the first crop, continued in succession till Christmas—the harvest time—when everybody turned out to gather the crop. A little before sunset, the people came into the logies or store-houses, where each person’s cotton was weighed. The men were generally bad and clumsy pickers, and brought only 30 or 40 lbs., but the more quick-fingered women, particularly those who

could take two or three children into the field to help them, came bending along under the weight of 100 lbs. or more of cotton.

"I may here mention that cotton, as it comes from the tree, is calculated to give one-third its weight in merchantable cotton—that is, 100 lbs. of cotton will yield $33\frac{1}{3}$ lbs. of clean cotton, after all the seeds have been separated from it. Close to the logies or store-houses, were the drogheries or drying-places, formed of tiles laid on the ground, on which the cotton was exposed to the sun. This was done by children; and it took three or four days thoroughly to dry a batch of cotton, the point of perfection being when the seed was dry enough to crack crisply between the teeth. The cotton might then be safely stowed away to await the 'gin-men;' but if packed up without this preparatory process, it would heat and spoil, with the chance of spontaneous combustion.

"Up to this point, the work of the estate might have been carried on entirely by women and children. But now came the hard work, viz. the separating the seed from the cotton, or 'ginning,' as it is called. The 'gin-house' was a large shed open at the sides; and on entering it, the visitor saw what he would probably imagine to be many knife-grinders working away at their wheels, while they turned them with their feet—for so was the foot-gin worked. Only, in place of the grindstone there were two rollers about 18 inches long, and as thick as an office ruler, turning in opposite directions, one above the other, and almost touching—one being made of brass, and the other of a peculiarly tough wood (*Yaruri* or paddle wood). In front of these rollers was a small feeding-board, at which the gin-man stood, and from which he fed the rollers with cotton, all the time causing them to turn at a quick, steady rate, by pressing with the foot on the treddle of his gin. The cotton wool passed through the rollers into a bag, and the seed, being too large to pass, went its way through a slit in the feeding-board. A good gin-man finished about 50 lbs. of clean cotton a-day, that is, 150 lbs. of seed cotton. But the cotton was not even yet ready for shipping, for a few seeds might have been crushed by the rollers in the process of ginning, and not only mingled little particles of their black husks with the wool, but also stained it with the oil which they contained. A few dry leaves also might have escaped the sharp eyes of the children when drying the cotton, and these crushed by the rollers, sullied the otherwise virgin purity of the wool. It was, therefore, handed over to women, about 60 lbs. to each, who picked out every particle of impurity before giving it over to be 'baled.' Very much of the market value of the cotton depends

on this hand-cleaning. It is light, easy work, and may be done in a drawing-room, and, I daresay, would give employment to hundreds of women and children who are now unaccustomed to out-door work.

“The cotton was now packed by means of a press and a powerful screw into bales about 30 inches square, each containing 330 lbs., so tight that they might be floated out to boats in the offing without being penetrated by the water. Having got our cotton ready for market, I must now go back to the field, where we kept all hands busy picking the first crop, which lasted till Christmas, and sometimes later. In January, showers generally fell and produced a new bloom on the trees; in February and March the second crop was gathered. This second picking, indeed, might have been in some degree continued all the year round; but it was necessary to prune the trees down early in April, so as to prepare them for the crop in the September following. This was very rapidly done, a couple of men to one acre, armed with sharp bills or cutlasses, trimmed down everything to about breast height, and left the field as level as a billiard table. This process of pruning might be continued annually for as many years as you liked, for the trees never died; but after five or six years they got ‘woody;’ and it was then always well to plant anew.

“It is not easy to give very exact information on an important point in cotton-growing, *viz.* the yield per acre. One year we got 600 lbs. of clean merchantable cotton from every acre in cultivation, on an estate of 500 acres; but this was considered something good. I do not think in the worst years the yield ever fell below 200 lbs. an acre; and, perhaps, it would be safe to estimate the average yield of an acre of cotton in Demerara at 900 lbs. of seed cotton, or 300 lbs. of clean cotton. This was the way things were done five-and-twenty years ago; but should cotton cultivation be re-introduced, of course it would be accompanied by horse husbandry and steam, and all the other appliances which modern science has devised to save human labour. With the aid of the hand-gin, the fibre might be brought to market without the labour of a single able-bodied man. No crop could be so easily raised and prepared by our cottage farmers, for every member of a household, down to children of eight or nine years of age, might perform some part of the process.”

PLANTAIN FIBRE, Nos. 1 AND 2.—The plantain is an annual herbaceous tree, the stem of which averages about 30 inches in circumference and 10 feet in height. It contains upwards of 90 per

cent. of water, holding salts and tannin in solution. Its solid parts consist of fibre and connecting cellular tissue. The fibre of thousands of acres of plantains is lost annually in this Colony from the want of a simple and inexpensive machine for separating it. The tree must always be cut down to obtain the fruit, and the stem containing the fibre is allowed to rot on the ground. Could an efficient and cheap machine be invented, the fibre would be almost entirely profit to the planter. The banana yields less fibre than the plantain tree, and its fibre is generally tinted.

Various attempts have been recently made to construct machinery for manufacturing the plantain fibre. Subsequently to the Exhibition at Paris, in 1855, strenuous efforts were made to establish the production of fibre in this Colony as an article of export, and the Messrs. WATSON had fibre-making machinery put up and tried on their estate, *Haagsbosch*, but it was not found well adapted for the purpose, the stems in their natural state being so much more bulky than was allowed for in constructing the machines.

Mr. A. D. VAN DER GON NETSCHER, when proprietor of plantation *Klein Pouderoeyen*, on the west bank of the River Demerara, in 1855, furnished the following interesting particulars relative to the cultivation of the plantain :—

“The experience of ten years on a cultivation of from 400 to 480 acres in plantains has shown that—

“1st. On a well-kept cultivation every acre will give 300 good and 50 inferior bunches of plantains per annum.

“2nd. On every acre from 700 to 800 stems are cut per annum, either for the fruit, or in consequence of having been blown down by high winds, or from disease or other reasons.

“3rd. On every acre only 400 suckers are planted at intervals of 12 feet, in rows 9 feet apart, a closer planting having proved to be injurious to the growth of the fruit and the development of the stem.

“4th. Of the suckers planted, not more than 75 out of 100 succeed, and the deficiencies require to be supplied. The cultivation will give on an average 5 good crops of fruit in two years.

“5. The planting of the suckers at distances of 8 feet apart has never been tried ; but I am of opinion that if so planted and cut down every eight months for the stem alone, an acre would give from 1,400 to 1,500 good stems every cutting, or

about 4,500 in two years. The cutting down the half-grown trees would force more stems to grow than is the case when the trees are allowed to attain maturity.

“6th. The keeping up of a plantain estate, on a large scale, costs \$30 per acre per annum, supposing the estate to be already in good working order.

“7th. On plantation *Klein Pouderoyen*, after repeated trials the plantain stem on an average has been found to give $2\frac{1}{2}$ lbs. clean, and $1\frac{1}{2}$ lb. discoloured and broken fibre, the latter only fit for coarse paper. This result, however, has been obtained by very imperfect machinery.

“8th. The average weight of the plantain stem is 80 lbs.

“9th. The stems can be transported from the field to the buildings for one dollar per hundred.”

SECTION C.

CHEMICAL AND PHARMACEUTICAL ARTICLES AND PRODUCTS.

“Guiana,” writes MALTE BRUN, “is famed for its medicinal plants. It supplies Europe with Quassia, or the wood of Surinam, The *Dolichos pruriens*, the *Palma Christi*, a species of Ipecacuanha, Gentian, the *Costus arabicus*, the Copaiba balsam, and many others are mentioned in the memoirs of BAJON and AUBLET.” Although this field of observation is comparatively unknown and uninvestigated, yet in addition to the simples or remedies familiar only to the Indians, the following dregs and materials used in the arts, some of well-known commercial value, may be enumerated, as a few among the products of the Colony. The Greenheart, whose bark and seeds yield Bibirine; Angostura bark, so efficacious in the milder forms of fever; Simaruba, the reputation of which is established in the cure of dysentery; the well-known Sarsaparilla; Spigelia; *Eryngium fetidum*, a new uterine specific; *Rhizophora racemosa*, found remedial in chylous urine; laurel oil, useful in chronic rheumatism, and an admirable solvent of India-rubber; tobacco, physic-nuts, wild cinnamon, ginger, guinea-pepper, capsicums, pimento, nutmegs, blackpepper, toyo, lemon-grass, wild honey, the fragrant tonka bean, and the odoriferous vanilla. The vegetable treasures of the mountainous regions have not yet been explored; but Dr. HANCOCK is of opinion that cinchona will be found on the

Makerapan range of mountains. Over the whole settled parts of the Colony is to be seen the papaw, with its wonderful property of intenerating fresh animal fibre; and in the remote creeks and recesses of the interior grows the *Strychnos toxifera*, one of the constituents of the famous Wourali poison.

After the close of the Exhibition of 1862, several of the medicinal barks contributed by the Committee of Correspondence were, at the instance of Miss BURDETT-COURTIS, subjected to the test of actual experiment in the treatment of disease by Mr. CHARLES HUNTER, surgeon to the Royal Pimlico Dispensary. Of the decoction of the bark of the Greenheart, that gentleman reports: "The effects of the Sipiri seemed to be to remove feverishness and strengthen both the stomach and system generally; the proportion of tonic principle in a given amount of this bark is much less than in the case of cinchona." Of the decoction of Bibirine he says: "This I have given in three or four cases, two being slight fever, with enlargement of the tonsils in children. Benefit followed in each case. The decoction was much more bitter than the ordinary decoction of Greenheart bark." Mr. HUNTER, moreover, instituted a series of experiments with the Wourali poison, leading to the subjoined, amongst other conclusions:—That the Wourali is a most powerful poison; that the hypodermical injection of a liquid solution places it in our power to regulate the dose to a nicety; that the muscles of the body and extremities may for days be more or less convulsed and paralysed, whilst the brain is unaffected and digestion remains perfect; that death appears to result from paralytic apnoea—apnoea accompanied by a loss of power in the respiratory muscles and not from coma, or a cessation of cardiac action. Mr. HUNTER adds, the expression of his full belief that both nicotine (with the action of which it has a marked similarity) and the Wourali have remarkable powers in them well adapted for combating severe spasmodic affections, of which tetanus is but one example; and he suggests the desirableness of obtaining and furnishing good samples of each of the active ingredients of the Wourali, for they separately, and being pure, may prove more valuable than the Wourali does itself, in a medical point of view.

The forests also yield their contributions to the Arts. Gums from the Locust-tree, from the Mani, from the Hyawa, from the Kurakai, and from the Wallaba; oils from the Crab-tree, from the Cocconut, the Monkey-Pot, the Wangala, the Souari, the Aeyuri palm and the Cucurit palm, are abundant. Arnatto, Fustic, Lana, Turmeric, Indigo, Logwood, and Brazil-wood, furnish materials for

dyeing, and barks suitable for tanning are innumerable. Referring to some of the vegetable products of this Colony, Dr. HANCOCK makes the following observations: "The Acqueru (Acuyuri) is a palm of moderate size, the fruit of which affords an abundance of a sweet bland oil, of a golden yellow colour, and of the finest quality. The large, sweet, and juicy fruit of the Ubudi affords a delicious wine, and its bark is of great use as an application to foul ulcers. Although this country has been but little explored, it is rather extraordinary that this fruit, one of the finest of the American Continent, should still remain totally unknown in Europe. The Dali, or Wild Nutmeg, a species of *Myristica*, abounds in the interior, and furnishes a vegetable tallow, which forms excellent candles, and, with an alkali, a soap of the finest balsamic quality. Here are numerous species of *Cassia*; the caoutchouc which gives the valuable elastic resin, and a multitude of gum-resins. The Hyawa, or Incense tree, perfumes the forest with its salutiferous balsam: and the great Siruba tree not only furnishes the finest timber in the world for ship-building, but also, by incision, a camphoraceous ethereal fluid, a product which, so far as we know, is without parallel in nature."

The forests yield caoutchouc, and a variety of gums of allied nature. One of these, recently known as 'Balata,' possesses properties intermediate between those of caoutchouc and gutta percha. Although several of this class of gums differ but slightly in chemical composition, it is well known that they are possessed of very different properties. For example, gutta percha becomes plastic when immersed in hot water, a property not possessed by caoutchouc. Again, while the latter can be extended with facility in all directions, the former admits of extension only in the direction of the fibre or grain. Caoutchouc seems impermeable to water even under great pressure and elevated temperature, while gutta percha is of a somewhat porous nature, and not so well adapted to the purposes of insulation in the construction of submarine telegraphs. This fact appears to have been established by the experimental researches of the Messrs. SILVER and Co., of London. While it is desirable that a more extensive knowledge should be obtained of the various gums yielded, by the forest trees and plants of this Colony, attention should be strongly directed to the importance of extending and improving the preparation of caoutchouc, as being likely to be attended with benefit in a commercial point of view. The numerous samples brought from the Upper Essequibo, although of fair value, indicate that the process of preparation admits of great improvement.

BALATA, Nos. 4 AND 5.—This substance, first discovered in Surinam, is the inspissated juice of the Bully Tree (*Sapota Mulleri?* or *Mimusops Balata*, Gaert., *Achras Balata*, Aubl.?) The tree was well known to abound in this Colony, and Dr. VAN HOLST, who had visited Surinam, on his return to Berbice, collected a quantity of the gum, with the view of bringing it into notice. It appears that Mr. D. MELVILLE, of Berbice, without being aware of its discovery in Surinam, had directed his attention to the milky juice of the Bully Tree, in his exertions to fulfil a promise made to Messrs. Silver in 1859, to search the forests of this country for a substitute for India-rubber.

The following remarks on the subject, well worthy of consideration, are from a paper communicated by Mr. MELVILLE to the Correspondence Committee of the Royal Agricultural and Commercial Society:—

“The Bully-tree, from which this gum, or gum elastic is obtained, is found throughout the colonies of British, Dutch, and French Guiana; and although known from the earliest history of this Colony as furnishing one of the most durable materials for house building, &c., it is strange that the abundant secretions of milk in its bark should until very recently have escaped attention.

“The first attempt to introduce this material to the notice of British capitalists as an article possessing some probable commercial value, was made by the writer early in the year 1860, when a small quantity of the gum sufficient for experimental purposes was sent to the house of Messrs. Silver & Co., of London. This was sent in consequence of a promise made to Mr. Silver in 1859, when visiting their factory at Silver-Town, to search the forests of Guiana on my return for a substitute for India-rubber, Mr. S. having expressed his apprehensions of the supply of that material failing them. The report on the article was then hardly satisfactory; but at the Exhibition of 1862, Sir WILLIAM HOLMES actively interested himself in bringing the specimens with which he was provided into further and more prominent notice. Towards the end of that year an application was made by the Messrs. Silver, urging that a few pounds of the dried material should be forwarded by return mail, if possible, to enable them to make certain experiments that might lead to satisfactory results. It so happened, that this communication was received just a day or two previous to the dispatching of a boat and crew which had been prepared for the Canje Creek for the purpose of collecting a quantity of the gum meant to be submitted to the Gutta Percha Company of London. No delay was therefore experienced in the matter. The

quantity of Balata asked for by the Messrs. Silver was promptly forwarded, and this, followed by larger shipments, formed the initiatory of a new trade in the Canje Creek.

• “In Berbice the tree is found most abundantly on the low reefs of the swampy Canje, and of sizes varying from 6 to 30 inches in diameter, and 20 to 60 feet of stem, clear of branches. There are two varieties, differing from each other mainly in the shape of the fruit and colour of the leaf. In one, the fruit is oval; in the other it is nearly round, being slightly depressed at the apex, and about the size of a large cherry. The crust-like rind encloses a sweet pulp and large seed, similar in every respect to the sapodilla. The leaves are oblong; the upper surface of a dark green, while the under is of a brownish tint, and glossy, but in the oval-fruited tree the shade of brown is much deeper; the milk, also, is of a redder hue than that procured from the round-fruited tree, due to the presence of a larger amount of tannin.

“The milk of the Bully-tree is perfectly wholesome, and is sometimes used in the ‘bush,’ as a substitute for cow’s milk in coffee or tea.

“In tapping for Balata, the cutlass is the instrument chiefly employed. The rough and woody outer bark is first scraped off, then a number of slanting gashes are made as high up the tree as the arm of the tapper will reach; in some cases double cuts are made, and the intermediate bark removed. The milk flowing from these cuts on each side, trickles down the centre to the foot of the tree, where it is conducted into a calabash, or other receptacle, by means of a leaf, one end of which is inserted under the bark of the tree, forming a sort of shoot. The quantity of milk thus obtainable from an average-sized tree, varies from 15 to 20 ounces, which, when dried, will give from three-quarters of a pound to a pound weight of solid Balata. This process does not injure the tree; those that have been tapped a year or two ago, may now be seen with a new bark filling up the old incisions.

“From some of the trees the milk flows freely for a few minutes, after which it only drips, and in two or three hours after stops altogether.

“Another mode of obtaining the milk is by felling the tree and ringing or making circular cuts along the whole length of it about a foot apart from each other; these cuts are made about an inch wide, and a calabash is placed on the ground under each of them to receive the exuding milk, which will continue to flow for several hours, provided the tree is not exposed to the sun. An average sized tree will thus yield from one to five gallons of milk (or $5\frac{1}{2}$ to 11 lbs. of dry

gum). Hollow trees yield much more milk than sound ones. The gum obtained by this process is much less coloured with tannin than that collected by tapping the standing trees, but the method is a most improvident and wasteful one, as apart from the destruction of the tree, which is seldom utilized, it is but a small proportion of the milk it contains that is thus secured. The branches, although capable of yielding the milk, in all cases, much more copiously than the trunk, are never bled, being more troublesome to deal with. To prevent this waste, and at the same time secure the large and continuous supply of Balata which they were anxious and urgent to procure, the promoters of the enterprise in England incurred heavy expenses in adopting and sending out machinery for extracting the juice from the bark, and a mill driven by steam power was erected and worked both in the Mahaiconi Creek and Berbice; but after large shipments of the gum thus procured had gone forward, it was only a short while ago pronounced to be almost unmerchantable from the excessive amount of impurities it contained; at the same time, owing to a decline in the price of gutta percha, a check was given to all Balata operations. The gum procured by means of the bark-crushing machines can, however, with little trouble be rendered quite as merchantable as that obtained by tapping, only the process hitherto adopted of boiling the juice must not be resorted to. The simplest method is to dry the material in clay pits, and afterwards remove the impurities by washing them out in hot water. Remet also is most likely to have the effect of coagulating the pure milk and separating it from all impurities.

“The Bully-tree yields its milk most abundantly during the rainy season (to which the foregoing remarks apply), and the best time for tapping the trees is at early morning, and a day or two after the full moon, from which time operations can be carried on without interruption until the next new moon appears, when the yield rapidly abates and the tappers can hardly earn a day’s pay. Be the influence what it may that acts on the trees, the moon certainly marks the fluctuations of it. In low swampy lands tapping can be carried on even in dry weather, but it is necessary for the tappers to be at their work by day-break, for as soon as the sun gets well up the milk ceases to flow.

“The material dries readily on exposure to the air, and much better out of the sun than in it. In dry weather the exposed surface, which in two or three days hardens and assumes the colour and consistence of sole-leather, may be lifted off, and the under side exposed to be hardened in its turn. This process is continued until the whole mass of milk in the vessel is dried, when it is put up for shipment in

sheets or moulded into blocks by means of hot water. It dries with difficulty in rainy weather, often remaining for weeks without forming a skin hard enough to be handled; but the whole body of liquid gradually thickens to the bottom of the receptacle. It is very susceptible to changes in the weather, and is constantly alternating from thick to thin as the weather changes from wet to dry. This may continue for six or eight weeks, by which time the whole mass has thickened to the consistence of cream, the exposed surface being now about dry enough to be lifted and turned. *

“The milk dries best in wooden vessels, which from the absorbent nature of the material hastens the process. It is curious and interesting to observe when peeling off the last layer of Balata, how beautifully every vein, grain, or knot of the wood is depicted on the side that was in contact with the bottom of the box. This peculiar property of the gum led me to make experiments with it on engravings. The specimen submitted is only a transfer of the picture from a paper to a Balata surface; but in a previous experiment I succeeded in obtaining a perfect copy of the picture, without injury to the original, true in every minutiae, but it was rather faint, and resembles a negative photograph, the lights and shades being reversed.

“If the gum is dried in tin, zinc, or iron vessels, it becomes perfectly black, having a bright metallic appearance.

“It coagulates instantly in alcohol or other spirits, but the gum is said to be injured by this process.

“Balata is leathery in colour and appearance. It is heavier than water; a piece selected as clean, dense, solid and dry, showed a specific gravity of 1.0422. It ignites and burns freely, evolving an odour like burnt cheese.

“It is soluble in chloroform, also in coal-oil, naphtha, and bisulphide of carbon, but only so long as these solvents are hot. Upon cooling, the gum separates, and deposits in a granular and disintegrated state. At a temperature of 120° Fahrenheit, in common with gutta percha, it softens and becomes plastic. After some days' maceration in water, it gives out a colouring matter, and absorbs. A week's maceration showed an absorption of 5 per cent. Exposed to a temperature of 300° Fahrenheit, in common with gutta percha, it melts; and upon cooling recovers its former hardness. It resembles both gutta percha and caoutchouc in its deportment, with excess of sulphur and heat, *viz.* conversion into a hard or horny material.

“Balata resembles caoutchouc with admixtures of smaller propor-

tions of sulphur and treatment by heat, yielding an elastic and soft vulcanized substance.

"It has been tested as an insulator, and found to be far superior to gutta percha, and second only to India-rubber.

"The gum is applicable for all purposes to which gutta percha has been applied; and, at the present moment, the following manufactured articles are to be procured from the "India-rubber, Gutta Percha, and Telegraph Works Company of London," viz. :—

Sheet Balata of all thicknesses.

Shoe soles and heels.

Cord, tubing, buckets.

Bed pans, basins, ewers (coloured and plain).

Carboys, syphons, funnels.

Acid scoops and pouters.

Chamber bowls, life buoys, &c., &c., &c.

"The material seems peculiarly adapted for making artificial flowers (see Specimens exhibited).* It combines readily with colours, and can easily be formed into thin sheets, and as regards durability it stands unrivalled.

"It has recently been used by Dr. Watkins as a splint for a broken arm, and was found to answer the purpose admirably, adapting itself, after immersion in hot water, exactly to the shape required, and hardening again soon after; while a manufactured gutta percha splint was found to be perfectly useless from being old and brittle. Pure Balata never becomes brittle.

"The following is a statement of the principal shipments of Balata from Berbice :—

						lbs.
In 1863	..	..	..	..	..	3,654
„ 1864	..	..	..	..	..	16,595
„ 1865	..	..	..	..	..	20,000

Enough, however, has been said on this and other occasions to indicate the unlimited field which the Colony offers for scientific, patient, and systematic investigation, and to establish the practical benefits to which such investigation would lead. The great drawback hitherto to a fuller recognition of its importance apparently consists in the want of sufficient and continuous supplies, to enable manufacturers and scientific men to introduce its products into the general markets for consumption.

* Catalogue : Section G.

SECTION D.

WOODS FOR BUILDING AND OTHER PURPOSES.

In treating of the timber and furniture woods of the Colony, we may observe that the descriptive particulars embodied in the Catalogue itself, supply all material information connected with their qualities and relative usefulness. It may be asserted, without reservation, that in this branch the natural productions of this Colony vie with those of any other part of the world. Two prizes were awarded to our timbers by the juries of the Great Exhibition in London, in 1851; and the excellence of two of them, namely, Mora and Greenheart, is acknowledged at LLOYD'S, where they rank among the *Eight* first-class woods for shipbuilding.

It is a matter of much regret to the Committee that the collection is deficient in many specimens of great interest and value, owing to accidental causes which could not have been anticipated, and which there is, unhappily, no time to remedy. It would, however, be easy to procure samples of most of them, should any person desire to have them, with a view to bringing them into use.

It has been already intimated that vessels of large draft of water can ascend the rivers to a considerable distance, and load timber from the wood-cutting establishments. Extensive tracts of primitive forests are yet untouched, especially beyond the Rapids, the difficulty of floating the timber over, operating at present against their full development. We cannot better wind up our remarks under this head, than by quoting the following paragraphs from the work published by Sir ROBERT SCHOMBURGK, twenty-five years ago, while we have to express our regret, that notwithstanding specimens of our shipbuilding woods have been furnished to the naval yards at Bermuda and in England, no effectual step has hitherto been taken, so far as we know, towards the practical realization of the suggestions therein contained. By reference to the tables of exports in page xxv, however, it will be seen that the demand for our timber has largely increased since the Exhibition of 1851, though it fluctuates considerably according to the condition of the home markets:—

“The fitness of the timbers for naval architecture is remarkable, and in some instances is said to surpass that of Teak. The Greenheart, the Mora, and Souari or Sewari, of all other woods, are most unquestionably the best adapted for shipbuilding. Within the last

ten or twelve years a considerable quantity of brown Greenheart has been sent to Liverpool and Greenock; and I have been told that builders and others interested in shipping are now of opinion, after about ten years' trial of the wood, that in strength and durability it is superior to any Oak, and it actually commands a higher price.

“Had these woods been introduced and extensively employed in the Royal Dockyards fifteen or twenty years ago, it is the opinion of competent judges that we should not now hear much of dry-rot and Kyan's patent; and not to mention the rapid decay of vessels built of English and African Oak, and the consequent frequent repairs, with what saving to Government would it not have been connected! If, therefore, the attention of the Navy Board could be drawn to the important fact that British Guiana can furnish the finest and most durable woods in the world, in sufficient quantities to supply all the shipbuilding establishments in Great Britain, a double benefit would arise from it—namely, the saving to Government, and the increased demand for this important production of the Colony. The first experiment might be to establish a dockyard for the repair of such of her Majesty's cruisers on the West India station as draw not more than eighteen or nineteen feet of water. The outlay of such an establishment would be trifling, if the importance of ultimate success be considered.”

We are informed by Wallace that when Brazil and Venezuela were under the Portuguese and Spanish governments respectively, building yards were established in several places where good timber was to be found, and the Indians were employed under naval architects from Spain and Portugal in the construction of vessels for the coasting and inland trade. These are still carried on, and the Indians form the framework and fit on the planks of fine little vessels of 100 tons and upwards, with no other tools than axe, adze, and hammer. On an average these craft do not last more than six or eight years—many not more than two or three—though there are woods which will stand for thirty years perfectly sound.

The Committee beg to call attention to the table of specific gravities of fifty-nine specimens of native woods prepared for the International Exhibition in London in 1862, by their late colleague, Mr. J. T. BOURNE, formerly Colonial Civil Engineer.* In a few instances, with a view to facilitate comparison, Mr. BOURNE has added the specific gravities of some European woods, and, in addition, it will not be irrelevant to

* See Note C, p. xcv.

reproduce in this form the results of the inquiries instituted and tests applied by the late Captain FOWKE, R.E., to ascertain the comparative value for purposes of construction of some of the specimens of forest timbers supplied by British Guiana to the Paris Exhibition of 1855, which will also be found in the present collection.

The first experiment made was to ascertain the breaking weight, the specimen being supported at the ends, and the strain being applied at right angles to its length midway between the points of support. The other experiments were directed to ascertain the power of the woods to bear a crushing strain, applied both in the direction of the grain (1), and also in a transverse direction (2), forming two distinct series of experiments, of which the testimony, as indicating the valuable qualities of the Guiana woods, must be considered highly satisfactory. It has been suggested by one of the most intelligent and experienced wood-cutters in the Colony, that it would be very desirable to have the series of experiments above alluded to renewed; and that the wood named "Purpleheart" (*Copaifera pubiflora*, Benth.) might, amongst others, probably be found well adapted for the inner lining or skin of armour-plated ships:—

Name of Specimen.	Size of Specimen.	Breaking Weight.	Crushing Weight † (1)	Crushing Weight † (2)	Amount Yielded.
* 5 Cabacalli . . .	1 2½ by 2 in. sq.	7163·0 lbs.	9920·7 lbs.	8818·4 lbs.	0·45
20 Mora	1 2 "	9697·6 "	9920·7 "	8818·4 "	0·50
3 Houbaballi ..	1 2 "	4518·2 "	5411·5 "	8818·4 "	0·60
10 Wadaduri . . .	1 2 "	10689·4 "	12125·3 "	8818·4 "	0·62
30 Purpleheart ..	1 2 "	6391·0 "	9920·7 "	8818·4 "	0·56
16 Wamara	1 2 "	12122·0 "	12566·2 "	8818·4 "	0·55
14 Sipiri or Green-heart (yellow)	0 11½ "	14528·0 "	12125·3 "	6613·8 "	0·11
Do. (black) ..	.....	13224·0 "	15432·2 "	8818·4 "	0·51
36 Cuamara (Tonka) . . .	1 2 "	10469·0 "	11463·9 "	8818·4 "	0·34
25 Ducalaballi ..	1 2 "	9367·0 "	13227·6 "	8818·4 "	0·57
35 Wallaba	1 5 "	5510·0 "	6613·8 "	3306·9 "	0·49
17 Silverballi (yellow)	1 5 "	4297·8 "	7716·1 "	8818·4 "	0·62
26 Carapa	1 5 "	5510·0 "	8818·4 "	8818·4 "	0·54
19 Simiri	1 1¾ "	6171·2 "	8818·4 "	8818·4 "	0·60

* These numbers refer to the numbers of the specimens in the Catalogue, Section D.

† Direct and transverse strains.

SECTION E.

INDIAN MANUFACTURES AND MISCELLANEOUS
ARTICLES.

The specimens of the products of the ingenuity of the native tribes of Indians will, doubtless, attract much attention. The condition of this singular race cannot but excite interest in the minds of all who have an opportunity of studying their character, and reflecting on the little that is authentically known of their history.

It is, of course, difficult to arrive at anything like the exact numbers of a wandering timid people, who shrink from contact with strangers, and who are almost unapproachable in the interior; the access to which—when the rivers, the great highways of internal communication, are left behind—is known to but themselves. The late census assumed the total number resident within the limits claimed for the British territory at 7,000; but Mr. M'CLINTOCK, the Superintendent of the Rivers and Creeks for Pomeroon, who resides entirely amongst Indians, and takes an active and earnest interest in advocating their claims to assistance in religious and educational instruction, carries this estimate much higher. He gives the Indian population of his own district at nearly 6,000; and from his knowledge of the Indian population generally throughout the Colony, he thinks the total number cannot be less than from twenty to twenty-four thousand. He assumes that since 1851 there has been a considerable increase owing to the missions having led to the adoption of more settled habits, and he strenuously advocates the augmentation of those means of civilization. The Rev. Mr. LOBSCHIED, a church missionary in China, who visited British Guiana in 1857-58, with the view of forming his own opinion as to the condition of the Chinese immigrants, records his opinion that were Christian Chinese families brought into the neighbourhood of the Indian mission stations, they would soon intermarry with the Indians, and thus absorb the remainder of those interesting people.

It would appear, moreover, as if within the last few years some progress had been made in overcoming the tendency of the Indians to wander over the country. At the latest visitation of the Bishop of Guiana to the Pomeroon Missions, there were present between 800

and 1,000 of them, including representatives of the following tribes: Arawaaks, Caribs, Waraus, Accawais, and some half-dozen of a tribe almost unknown to Europeans, called Mai-ong-kong, from the Upper Orinoco. The River Corentyn is now the only river in which no provision exists for the spiritual instruction of the Indian tribes, of whom, we are informed by the Rev. Mr. VENESS, a clergyman who visited the river in 1866, for the purpose of acquainting himself with their actual position, there are in the lower district about 250, partly Arawaaks and partly Warraus, with a few Caribs. Mr. VENESS remarks that the different tribes are less scrupulous there than in other parts of the Colony as to intermarriage, there being several instances of Arawaaks taking Warrau wives, and *vice versâ*; whilst, especially amongst the Caribs, there are evident traces of the admixture of negro blood. Polygamy exists to some extent, and on an average there is only one child to every couple of adults.

The following are the names of the different tribes known in the Colony:—Arawaak, Warrau, Caribi or Caribisi, Accawai or Waccawai, Taruma, Macusi, Arecuna, Wapisiana, Atorai, Woyawai, of which the last six are found only far in the interior. Of these, the most powerful are the Maensis and Arecunas, who occupy the tracts on the southern and south-western boundary; but of the Caribs, once widely spread over the West India Islands, and a terror to all who attempted to settle in their territories, comparatively few remain in this province. In stature and features, in customs and modes of life, the tribes generally resemble each other, yet there are striking differences in their languages. Sir R. SCHOMBURGK is of opinion, judging from the affinities of the roots of their dialects, that the Caribi, the Macusi, the Arecuna, and the Wapisiana tribes, are descended from a common stock; the Accawai language is merely a dialect of the Caribi; the others differ, more or less, in their composition.

That the numbers of these people are gradually diminishing is the concurrent opinion of all writers upon the subject.* Among the causes assigned for this result have been mentioned their contact with what are termed civilized nations, who have tyrannized over, instead of cherishing them, and who have imparted to them the vices and diseases without the virtues of civilized life. This, however, is most assuredly not applicable to the Aborigines of this Colony, who have for many years past enjoyed peculiar privileges, entitling them to roam undis-

* Humboldt would appear to have been of a different opinion when he visited the country, which however was upwards of sixty years ago.

turbed through a vast territory, to settle and occupy the land wherever they pleased, and to cut timber on all lands not actually granted. In fact, until a recent period, Magistrates, entitled "Protectors of Indians," were charged with the duty of looking after and preserving intact their rights and privileges, and more especially in protecting them from imposition and oppression: and, under the superintendence of these officers, a distribution was periodically made of articles supposed to be useful or necessary for their comfort or support. It is known that in the neighbouring territory of Venezuela the Indians are still subjected to much oppression, and it is alleged that, at the present day, the Brazilian authorities have recourse to slave-hunting expeditions amongst them, even in the disputed territory; in confirmation of which Sir ROBERT SCHOMBURGK gives the following particulars of what he himself witnessed:—"The system of the Brazilians of hunting the Indians for slaves exists to this day in all its atrocities. These slaving expeditions, or *descimentos*, from political motives, are always directed towards the contested boundaries; and their practice is, when arrived at a populous Indian village, to await the mantle of night in ambush, and to fall upon their unsuspecting victims when enjoying their first sleep. By setting the cabins on fire and discharging their muskets they create consternation, and succeed in securing the greater part of the former peaceful inhabitants. I had thus the grief, while at the Brazilian boundary, Fort San Joaquim on the Rio Branco, in August, 1838, to witness the arrival of a similar expedition, which surprised an Indian village near the Ursato mountains, on the eastern bank of the River Takutu, on the contested boundary of British Guiana, and carried forty individuals, namely, eighteen children under twelve years of age, thirteen women, and nine men, of whom only four were under thirty years of age, and two above fifty, into slavery. These abominable proceedings were carried on under the warrant of the district authorities."

The Indians are reluctant to submit to European medical treatment, and when fever or small-pox prevails many die from neglect or want of medical aid. Infanticide is believed not to exist, at all events as a practice, among the Indian tribes. The law of retaliation has also its effect in reducing their numbers, although the Indians are more amenable in this respect than they formerly were to the influence of authority, whether that of the Government or of Ministers of Religion. Cases have even recently occurred where the kinsman of the party whose blood had been shed, has intimated to the local Magistrate that if the homicide were arrested and dealt with according to English

law, he would waive his right to revenge; but otherwise, sooner or later, the life of the murderer would be taken for that of his victim. Yet all these causes combined seem inadequate to account for the gradual disappearance of this race.

There are various settlements in charge of Ministers of the Churches of England and Scotland, and one connected with the Roman Catholic Church, established for the especial benefit of the Indians. These efforts have been attended with considerable success; but so strong is the tendency in the Indian character to revert to the savage and nomadic habits of their race, that such attempts at civilization are rarely attended with permanent results.

Though Indians are averse to labour, and apt to procrastinate, yet if they once engage to execute any work, they are faithful to their promise. In some districts they are of great assistance to the woodcutters, though unfortunately the associations to which they are there exposed are anything but beneficial.

The Warraus are peculiarly expert in the manufacture of corials or canoes, which are made by scooping out the trunks of trees, such as the Red Cedar, Curahuri, Itabelli, Kurakai, &c., some of which are of such dimensions as to carry a hundred people. They occupy the alluvial coast flats, which would be uninhabitable but by such a race. Their houses are erected over the water, and remind us of the "lake dwellings" of primitive peoples elsewhere, whose remains have given rise to so much interesting and ingenious speculation.* Dr. HANCOCK

* Herodotus, speaking of the inhabitants of Lake Prasias amongst those who were not conquered by Megabazus, one of the generals of Darius, thus describes their dwellings:—"Platforms supported upon tall piles stand in the middle of the lake, which are approached from the land by a single narrow bridge. At the first, the piles which bear up the platforms were fixed in their places by the whole body of the citizens, but since that time the custom which has prevailed about fixing them is this:—they are brought from a hill called Orbélus, and every man drives in three for each wife that he marries. Now the men have all many wives a-piece, and this is the way in which they live. Each has his own hut wherein he dwells, upon one of the platforms, and each has also a trap-door giving access to the lake beneath; and their wont is to tie their baby children by the foot with a string, to save them from rolling into the water. They feed their horses and their other beasts upon fish, which abound in the lake to such a degree that a man has only to open his trap-door and to let down a basket by a rope into the water, and then to wait a very short time, when he draws it up quite full of them." To this the Editor appends the subjoined note:—"Recent discoveries in the lakes of Central Europe, particularly those of Switzerland, have confirmed in the most remarkable way this whole description of Herodotus. It appears that at an ancient date, probably anterior to that of the immigration of the Celts, there lived on most of these lakes a race, or races, who formed for themselves habitations almost exactly like those which He-

remarks that they exactly resemble the tribes on the shores of the Amazon, in Brazil; their feet are splay, or what is termed "duck-footed," with the toes spread out to facilitate their walking on the mud. The Macusis manufacture the celebrated Urari, or Wourali poison. This poison is in use among all the South American Indians, from the Amazon to the Orinoco; but the Macusis concoct it in the greatest perfection.* For information concerning its preparation and use, the reader is referred to the interesting narrative of WATERTON ('Wanderings in South America'), whose first journey into the interior was undertaken chiefly to obtain a choice specimen from the Macusi country. In the same amusing volume will be found an excellent description of the blow-pipe, arrows, and quiver referred to in the Catalogue, by means of which the Wourali poison is practically applied by the Indians in the pursuit of game.

In consequence of the scarcity of salt among the Indians, they have recourse to a mode of preserving fish and game, termed "barbacoing," which is, by suspending the meat on a frame over a wood-fire, and exposing it to the smoke for about twelve hours; it will then

Herodotus here describes. At a short distance from the shore, rows of wooden piles were driven into the muddy bottom, generally disposed in lines parallel to the bank, but not at regular intervals, upon which there can be no doubt that platforms were placed and habitations raised. Within the area occupied by the piles, and over the space immediately adjoining, are found at the bottom, often occupying a depth of several feet, objects of human industry, consisting of rude pottery and various implements in stone, bone, and bronze. Everything marks the high antiquity of these remains. The pottery is coarse in character, and shaped by the hand; it has scarcely a trace of ornament. The implements in stone and bone indicate a nation in the most primitive condition. The complete, or almost complete absence of iron is most significant. Also, it must be observed, that there is in most places a deposit of mud, the growth of centuries, covering the remains, in the whole of which there are no implements. Bones of animals which had apparently been killed for food, appear throughout the whole stratum of mud in which the implements are found. In one case, at least, a remnant of the bridge has been discovered by which the inhabitants communicated with the land. * * * * Antiquaries seem fully agreed that these are amongst the most primitive remains in Europe, belonging either to the early Celtic, or, perhaps more probably, to a pre-Celtic period. * * * A similar mode of life to that here described by Herodotus, and apparently practised by the early inhabitants of Switzerland, is found among the Papous of New Guinea."—HEROD. *ed. Rawlinson*, 1862, iii., p. 185 .

* Bates (*vide* 'Naturalist on the Amazon') says:—"The natives of the Upper Amazons procure the *coaitá* when full-grown by shooting it with the blow-pipe poisoned darts, and restoring life by putting a little salt (the antidote to the Urari poison with which the darts are tipped) in its mouth. The animals thus caught become tame forthwith."—Vol. i., p. 247.

keep perfectly sweet for many weeks, the smoke acting as pyroligneous acid upon the fish; and this method is more effectual than if the fish had been simply moistened with the acid, as it combines the complete exsiccation of the animal substance with the effect of the pyroligneous acid.

The implements used in the manufacture of cassava-bread display considerable ingenuity. The "Simarri," or grater, is made of a flat, thin board, one side of which is covered with particles of broken quartz, fixed in a coating of resin, put on while hot. When the cassava root is converted into pulp by this process, it is put into a long, tube-like basket, called "matapi," where it is compressed, as described in the Catalogue. (See Section E., No. 31.)

The weapons, hammocks, and basket-work of the Indians, especially the nests of what are called "Pegalls," evince a good deal of natural taste in design, as well as of skill in manufacture. It is a remarkable fact that some of the patterns on their basket-work bear a strong resemblance to the architectural frets of the ancients; one, in particular, often seen on the "Pegalls," is identical with the "Meander pattern" of the Greek and Etruscan vases, which is also found in Egyptian and Assyrian ornamentation.

Amongst the miscellaneous objects contained in the collection of which we are now treating, will be found a few specimens of bones and shells, from a tumulus or mound at the Indian Mission Station of Waramuri, on the River Moruca. For the loan of these the Committee are indebted to the Trustees of the British Museum through the interposition of Professor Owen, by whom they had been examined and arranged. It had long been the opinion of the Rev. W. H. Brett, now Rector of the parish of the Holy Trinity, in Essequibo, under whose charge the Pomeroon Missions were originally established, that this mound either resembled the "kitchen middens" (*kjökken moddings*) of Denmark, or was an ancient sepulchral barrow, and in the latter part of the year 1865, he commenced an excavation with the view of determining the question. Having transmitted an account of the operation, together with samples of the remains, discovered to a friend in Georgetown, so much interest was excited that the Governor, attended by some of the leading gentlemen of the Colony, proceeded to the mission in the month of February following, and a further exploration took place under his personal auspices. The section opened was cut down to its base upon the sand, and quantities of human remains were found reaching to the very bottom of the mound. Their being discovered at this distance from the surface, upwards of twenty feet below the top of the

mound, would seem to negative the idea that these skeletons could have been interred in the ordinary course of sepulture. It was remarkable that in many instances the thigh-bones and those of the leg, and also the bones of the fore-arm and arm were doubled up on each other, and in no single case did a hand or portion of a hand remain attached to the fore-arm, although finger-bones were found scattered about in all directions.* The whole mass of the mound consisted chiefly of black and white striped periwinkle shells, similar to those found on the surface, with those of crabs, mussels, clams, whelks, &c., in infinite quantity and variety, the first named (*i.e.* the periwinkle) greatly predominating; mingled with these are the remains of vertebrate fishes and land animals, the whole presenting the appearance of being the refuse of innumerable meals of some race of former days, when those shell-fish (many kinds of which are now scarcely known on the muddy shore) must have abounded, and Waramuri ridge, now separated by ten or twelve miles of alluvial deposit from the sea, was probably a promontory or an island.† In addition to the remains above indicated, Mr. BRETT procured specimens of the human remains, two lumps of hardened red paint (called by the Indians *Sereh*), four or five heads of stone hatchets, or rather ancient tomahawks, which must have been inserted in handles of heavy wood, a broken stone with sharp edge, which may have been used as a knife, and a strange rod, or petrification, of a substance heavier than the bones, which was unfortunately broken into four pieces in being dug up. No bead nor any kind of ornament were found, neither gold, nor any other kind of metal, but some small fragments of granite and other stones. The existing Indians have a tradition that the cannibal tribes always broke the bones of the victims to extract the marrow; but none of them knew anything of the history of this mound. Similar remains, it is thought, may be found where the alluvial deposits join the higher lands which seem to have been the original shores of the Atlantic.‡ Professor Owen has stated his opinion that such explorations are highly desirable, and should be continued, as affording valuable additional testimony to the similarity of the habits and procedures of the earliest known races of mankind in different and remote parts of the world. On the remains now alluded to, Professor Owen has been so obliging as to furnish the following memorandum:—“These remains belong to:—human species; a ruminant, apparently a small deer; an alligator; fish (freshwater), includ-

* The Governor's visit to Waramuri, Demerara, 1866.

† Rev. W. H. Brett.

‡ Ibid.

ing the *Sudis gigas*, a large South American species ;* *Neritina lineolata*, a freshwater South American shell ; *Purpura coronata* ; *Lucina Jamaicensis* ; all shell species now living in the sea or estuaries of the north coast of South America. As these shells might have been brought from the sea shore to the mounds, I cannot hazard an inference as to any important change of coast-line since the period of the deposition of the above organic remains in the mounds."

Allusions to the existence of cannibal tribes in the remote interior of Guiana are occasionally, though not commonly, met with, in the writings of modern travellers. They seem to have been fully brought together by Mr. Bennett, a gentleman in the Colonial Civil Service, who has recently published a handsome volume,† embodying a general description of the province, illustrated by photographs taken by himself. Humboldt records the account given by an Indian chief or captain, Javita, in whose veracity the missionaries placed great confidence, and Captain (now Sir James E.) Alexander, in a communication inserted in the Journal of the Royal Geographical Society, quotes from the MS. notes of a deceased traveller, Lieutenant Gullifer, to which he had access in the Colony, but which have not, we believe, ever been published, the story of an adventure with a tribe of anthropophagi, high up the Essequibo River, who were said to be Caribs ; and from the testimony of Wallace, Bates, and others familiar from long residence with the tribes of the Amazon, there can be no doubt that some of them are cannibals.

In Mr. Bennett's volume, Sir ROBERT SCHOMBURGK is quoted as authority for the statement that the Caribs still believe in the existence of a republic of females beyond the great cataracts of the River Corentyn : "and if," he remarks, "the tradition originated with the Europeans, it is extraordinary that it has not only remained but is even now adopted by several Indian tribes in Guiana, and the Caribs of the Rivers Corentyn, Essequibo, and Rupununi ; they, in the gravest manner, declare that these separate bodies of females, or Worisamacos, still exist at the upper part of the Corentyn, in a country called Maraworine."‡ The explanation suggested by Wallace and some other

* The *Sudis gigas* is mentioned by Schomburgk as amongst the fishes considered unclean by the Macusis and Caribs.

† An Illustrated History of British Guiana, compiled from various authorities, by G. W. Bennett. Royal 8vo. Demerara, 1866.

‡ It has been thought fabulous that such people existed, or even that women enjoyed equality with men, yet Livingstone reports (pp. 622-623) that such a position is occupied by the female sex in some parts of South Africa at this day.

writers of authority is, that the personal appearance of certain tribes of Indians has given rise to the misconception. The men have the hair carefully parted and combed on each side, and tied in a *queue* behind; in the young men, it hangs in long locks down their necks, and with the comb, which is invariably carried stuck in the top of the head, gives them a most feminine expression, increased by the use of large necklaces and bracelets of seeds, and the careful extirpation of every symptom of beard.

The "picture writings," described by SCHOMBURGK as having been traced by him over an area of 350,000 square miles, and specially noticed also by Wallace, in his travels in the Valley of the Amazon, possess a peculiar interest in connection with researches into the history of the races by whom this vast region was originally peopled. Humboldt says that when the natives are asked how the figures could have been made at such a height, on rocks now inaccessible but by scaffolding, they reply, with a smile at the ignorance of the inquirer, that at the period of the Great Waters their fathers went to that height in boats. It would be impossible, however, on this occasion, to do more than indicate the existence of a few amongst the numerous points deserving of investigation, and we shall therefore only add that it is the belief of well-informed observers, that such inscriptions were executed by a civilized people at a very remote period of antiquity.*

Among the Nairs of Malabar each woman has several husbands, and property passes through the female line in preference to the male. And it is also certain that some nations have affected the Government of Queens, as the Idumean Arabs and perhaps the Ethiopians. (Note to Rawlinson's 'Herodotus,' vol. iii., p. 19, 1862.) Humboldt seems disposed to believe the existence of Amazons not merely imaginary. Schomburgk incidentally mentions that the Indian chieftain derives his hereditary dignity *from the mother*.

* Two interesting works on the Indians in British Guiana have been published, one by the Rev. J. H. Bernau, formerly in charge of the Indian Missions in the Essequibo River, intitled 'Missionary Labours in British Guiana,' 8vo, London, 1847; the other by the Rev. W. H. Brett, the first missionary to the Pomeroon, intitled 'Indian Missions in British Guiana,' 12mo, London, 1851: of this last-named work the Committee believe a new edition is preparing by the author. The Rev. W. Veness is the author of a recent work, on a very important question, intitled *El Dorado*, or 'British Guiana a Field for Colonisation,' 8vo, London, 1866, which, like that of Mr. Bennett, above noticed, embodies copious extracts from most, if not all, accessible authorities who have written on the Colony. The Rev. R. Duff has also published some notes on British Guiana.

SECTION F.

NATURAL HISTORY.

The profuse liberality with which nature, in all her departments, has endowed this province, has been already the subject of remark. It may be, indeed, literally said that earth, air, and water alike teem with living organizations worthy of study and suggestive of admiration. "A confused noise issues from every bush, from the decayed trunks of the trees, the fissures of the rocks, and from the ground, which is undermined by lizards, millipedes, and blindworms. It is a voice proclaiming to us that all nature breathes; that, under a thousand different forms, life is diffused in the cracked and dusty soil as in the bosom of the waters, and in the air that circulates around us."*

It is believed that the following sketch of the "Animal Kingdom" of this Colony, as given by Sir R. SCHOMBURGK, will be found to be interesting and instructive:—

"The quadrupeds of the Western Hemisphere do not equal in number nor in size those of Asia and Africa. The jaguar, or South American tiger, the puma, or American lion, and several others of the cat species, are the most ferocious; nevertheless, there are but few instances known where they have attacked men; and they are only feared as depredators on the flocks of cattle and sheep of the Colonists.

"It is not my intention to enter in this work, the extent of which is limited, into a description of the animals which are indigenous to Guiana; I shall content myself with enumerating such as contribute to the wants of man, affording a wholesome and delicate food. To this belong the tapir or maipuri, the capibara, or water-haas, the labba, the aguti, the acuchi, the cairuni or wild hog, the peccari or Mexican hog, and deer of different species; other animals are the ant-eater, armadillo, sloth, otters, several species of polecats and opossums. Numerous herds and varieties of monkeys people the otherwise solitary forests, and serve as food to the natives. The manati, lamantine and sea-cow, is from time to time met with in the larger rivers: its flesh is white and delicate, and has been compared in taste to veal.

* Humboldt.

“Not less numerous are birds: and while some astonish us by their magnificent plumage, others fully make up for their deficiency in this respect by their delicate and nutritious flesh. To the latter belong divers species of wild ducks,* the powis, the marudi, the hannaqua, resembling a pheasant, the duraqua and maam, both resembling the European partridge, wild pigeons, &c. Among divers others, I have yet to mention the jabiru or tararamu, a large bird which frequents the savannas, and the flesh of which is not unlike beef in taste—parrots, macaws, the plumage of which glows with the most vivid taints of blue, scarlet, purple, and yellow; the numerous species of humming-birds covered with the most gorgeous plumage, and glittering with metallic lustre when winging their way from flower to flower; the toucan, the bright yellow and black mocking birds, which construct their pendant nests on the same branch with the wild bees or wasps, with which it appears they have entered into alliance, and receive their protection. The most courageous of the monkeys, or the wariest of the cats would not attempt a depredation on their eggs as long as under the respected protection of these insects. The bell-bird, or campanero, white as snow, with a leathery excrescence on its head, the cry of which has been resembled to the tolling of a convent bell; the magnificent cock-of-the-rock, with its bright orange plumage, and its head surmounted by a semicircular erect crest, convey an idea of the splendour with which nature has decked its offspring under the tropics.

“Of the Saurian tribe the caiman and alligator are perhaps the most formidable. The latter is too small to become dangerous; frequently, however, as I have met with the former, I never observed any disposition in them to attack us, unless we had provoked them. The alligator inhabits the coast regions; the caiman is only found in the interior.† The guana, which has the appearance of an overgrown lizard, is from four to six feet long, including the tail; it is entirely harmless, and its flesh is declared very delicate by every one who has overcome the prejudice which its appearance generally creates.

“Land tortoises and fresh-water turtles are very abundant, the

* Hillhouse states that the Musk (improperly Muscovy) duck and Vicissi duck, which are excellent eating, roost on trees; and that he has seen at the top of a decayed Ita palm the nest of the Musk duck, with the parents bringing singly by the neck a brood of fourteen ducklings to the water—a feat which was accomplished in five minutes; and that he failed to catch a single duckling, although they then for the first time tried their skill in swimming and diving.

† Humboldt speaks of real crocodiles on the Rio Apure, not caimans or alligators, with feet dentated on the outer edge like those of the Nile.

latter chiefly in the River Essequibo and its tributaries. They assemble in large numbers during the time that the female deposits her eggs on the sandy shore or banks of the rivers. The eggs are very delicate, and are eaten fresh and smoked by the Indians; or they prepare from them a sweet-tasted oil, which is much used for culinary purposes by the Brazilians.

“Several of the serpents of Guiana are poisonous; but as if in some measure to guard against their formidable quality, nature has rendered them less dangerous by making them sluggish and loth to bite, unless irritated. The conocushi or bush-master, the rattle-snake, the labari, the parrot, and guana snake, the capairu and scarlet snake are among the most dangerous. The camudi and colukunaru belong to the genus *boa*; but the instances where they are known to have attacked man are very few; they satisfy themselves with surprising deer and other smaller animals.

“The rivers of the interior teem with delicious fish in great variety. The arapaima or pirarucu (*Sudis gigas*), and a species of *Silurus*, the lau-lau, are from ten to twelve feet long, and weigh from two to three hundred pounds. The lucanani or sun-fish, the hiamara, bashaw, cartabac, gilbagre, the delicious pacu, the arouan, the paiara, pirai, the morocoto or osibu, the laukidi, the parrau, &c., vie in delicacy with any of our European fresh-water fishes, while numerous others contribute equally to the nutriment of man.

“Among insects, some species of ants prove destructive to vegetation; and the *Termites*, or white ants, are known to have become injurious to the frame-work of houses, or to furniture, if they are allowed to take up their residence in a dwelling. The sting of the scorpion and the bite of the centipede are painful, but not dangerous. They are chiefly confined to rubbish and old houses. The bite of the bush-spider, and what is here called the tarantula, produces inflammation of the part where the bite has been inflicted, yet has never endangered life. The tshiko or chigo, a small species of flea which penetrates into the skin of the feet, proves frequently very troublesome; it infests abandoned huts, chiefly where there is a sandy soil; cleanliness in great measure banishes it.”

Professor Agassiz, in a course of lectures recently delivered by him in New York, states that he found the Amazon had not one fish in common with any other fresh-water basin; that different parts of the Amazon have fishes peculiar to themselves, and in a small lake or pool of only a few hundred square yards in extent he found 200 different

kinds of fishes, which is three times as many as are found in the Mississippi River. In the Amazon itself he found 2,000 different kinds, and when he began his researches only 150 were known; and in proportion as he found the larger number the differences between them seem to grow. He instanced one that might be called a peculiar fish, having the power of creeping or walking on dry land, one having been found five miles from the water. Professor Agassiz had himself kept one out of water for half-a-day, and on returning it, it was as active and lively as if it had never been removed. Its agility is remarkable, working its way up the inclined plane of a tree and amongst the branches, until a single shot has sometimes brought down bird and fish together. The Amazon, with turbid waters and a temperature of 80° , supplies an extraordinary number of delicious fish for table use.

We shall find, by reference to Schomburgk's contributions to the Naturalists' Library, "Fishes of British Guiana," 1860, that the above description is far from being inapplicable to the waters of British Guiana, whilst Wallace and Bates have anticipated the professor in calling attention to the wonderful productiveness of the Amazon and its tributaries in this respect. "Such of the Guiana fresh-water fishes as might prove of economical use to mankind are exceedingly numerous. The many noble streams of those fertile regions are in general stocked with fish, although at present they profit only a few. * * * * If the fisheries were carried on in a more active way, and not as pastime or merely on a tour of pleasure to give some change to a monotonous and indolent life, it would not only become productive of considerable benefits to those who embark in it, but open another resource of the Colony which at present lies entirely neglected. * * * * If we consider that pilchards alone are exported from Great Britain to the annual amount of £50,000, principally to the West Indies, along with herrings and mackerels to a much larger amount. For the use of the labouring population, it forms rather an important point to one of those colonies which contribute to the consumption of that kind of nourishment, that its own rivers abound, if not in the same, at least in similar articles of food. Again, with especial reference to Professor Agassiz's "peculiar fish," we may quote Schomburgk's remarks: "A species of fish which belongs to the same division as the *callichthys*, namely, the *Doras Hancockii* of Cuvier and Valenciennes, possesses the singular property, as we are told already by Margrave of his *Tamoata*, of travelling over land. I have been informed by eye-witnesses that they have met sometimes whole droves during the dry season when

those pools of water which had remained from the last inundation were about to dry up. They then march overland in search of water, and the shields with which their body is armed, as well as the strong spring ray of their pectoral fins, serve to help them forward. It is thought that they have the power of retaining a portion of water in a membranous bag surrounding the gills, which keeps the filamentous structure moist, and enables the animal to continue the respiratory action. So numerous are these droves that the negroes have sometimes filled whole baskets during the terrestrial excursions of the droves in search of their natural element."

We shall now glance at one or two particulars without which the capabilities of this Colony could not be adequately appreciated.

Allusion has been made to the extensive savannas, or, as they would be termed in North America, prairies. These are at present almost untenanted, while they afford ample means for maintaining the largest herds of cattle and horses. The Colony is, to a great extent, dependent upon Venezuela for its supplies of cattle, and not unfrequently indebted to the United States for a seasonable addition to its slender stock of sheep. The Brazilian Government, towards the close of last century, established some cattle farms in the neighbourhood of Fort San Joaquim. During the revolutionary disorders, these were abandoned, and the cattle dispersed over the adjacent plains, where they have multiplied. It is alleged that the savannas of the Berbice and Demerara Rivers are much superior to those of the Rupununi as grazing grounds; hence an opening for the enterprise of those who may have neither the means nor the inclination to venture upon so uncertain a speculation as that of the cultivation of sugar.

Although the waters of the Colony abound with the utmost variety of fish, yet, as an industrial pursuit, fishing may be said to be comparatively neglected. Fishing, indeed, is a favourite resource of the idle, who, in the course of an hour or two, provide themselves not only with fish enough for their own subsistence, but with a surplus which they dispose of at exorbitant rates. Isinglass or glue, prepared from the sound of the gilbagre or gilbacker (*Silurus Parkeri*), is exported to some extent. Some of the river fish, especially the pacu (*Myletes pacu*), the cartabac (*Tretragonopterus latus*), and others, are excellent food when dried and smoked; and, doubtless, even in this department, there is much which might be turned to profitable account by the exercise of a little enterprise and ingenuity.

We may here direct attention to the circumstance that perhaps in no branch of the natural history of this large territory is our knowledge

more defective than with respect to its mineral wealth. The water of the various artesian wells throughout the Colony, as well as that of many natural springs, is strongly impregnated with iron. Thermal springs have not been found in any part of the Colony. Vast tracts of brown iron ore are met with in the mountains and the flats between the rivers; rock crystals, embedded in sandstone, are to be procured in the vicinity of Roraima; veins of quartz frequently traverse the great masses of granite; but there is a total absence of limestone and its modifications.

That the precious metals exist there is abundant evidence to show, although hitherto the discoveries made have not been of sufficient extent to induce what may be termed a "rush" of gold-seekers. In the latter part of the year 1857, in consequence of popular feeling having been unusually excited by reports of successful operations at the Venezuelan gold fields of Caratal, some exploring parties were sent out in various directions, and amongst them one which, selecting the route of the River Cuyuni, reached the Caratal diggings; and on its return discovered specimens of gold in the bed of one of the creeks tributary to that river, at no great distance from its confluence with the River Massaruni.

A company was formed and incorporated by an ordinance of the Legislature in the year 1864, for the purpose of exploring the locality and of satisfactorily testing whether mining for gold could be profitably carried on. After surmounting many difficulties and discouragements, the fact was established that gold was procurable in remunerative quantities, but in order to the full development of the necessary operations, additional capital was called for, and this, unfortunately, happened in the course of last year, when the commercial panic was at its height. Meanwhile the Venezuelan Government, through their representative in London, called the attention of her Majesty's Government to a rumour alleged to be prevalent in Venezuela to the effect that British subjects were engaged in working gold mines within the territory of the Republic; and a notification or warning was forthwith conveyed to the Company by order of the Secretary of State for the Colonies, to the effect that they must consider themselves merely on the footing of adventurers, working at their own risk, and without any claim to the protection of the Government in case they should be interfered with. The official promulgation of this decision has been, of course, most injurious to the prospects of the Company, and already have acts of lawless violence been committed on their property with the boldest claim to immunity

—while it is quite possible that such an impression may yet operate in a manner to embarrass the local Government. And the question as to what *are* the rightful boundaries of the British possessions, which has been in abeyance for something like half a century, seems as far as ever removed from a satisfactory solution. The importance of a prompt and permanent settlement can hardly be over-estimated when it is considered that the alleged assertion of the Venezuelan authorities, that the works of the Company are “thirty leagues” within their territory, implies a claim to the whole of the counties of Demerara and Essequibo, and a portion of the county of Berbice, comprising more than three-fourths of the population, and more than five-sixths of the property of the province, which has for upwards of thirty-five years been officially designated and recognized as “British Guiana,” consisting of the united Colonies of Demerara, Essequibo, and Berbice.

Attention has been recently specially directed to the suitableness of the Brazilian Empire for the settlement of Europeans. Of this there seems no reasonable ground to doubt; but it is not unfair to point out that British Guiana, assuming its territorial limits to be once satisfactorily defined, has claims for consideration similar in kind if unequal in degree. Of Brazil it is written: “not a fiftieth part of the region has hitherto been surveyed—not a twentieth has been explored—the boundaries have never been determined, and civilization inhabits no more than a narrow strip along the coast.” This is literally true also of British Guiana—Brazil requires population—so does our own province; no question affecting its future career is of more urgent importance or of greater magnitude than that of offering adequate inducements to colonization upon a sound and practical basis. Much misplaced and groundless criticism has been applied to the existing restrictions upon the sale of the Crown Lands, but, without entering here upon their explanation or defence, it may be sufficient to remark that they have been hitherto fully justified by the actual circumstances of society; and that whenever the Government shall see its way to the introduction of colonists qualified to contribute to the material and moral prosperity of the community, nothing will be easier than to readjust the arrangements upon which land can be set free for their occupation. An able and independent member of the local legislature is about to bring the subject before the Combined court, in a series of resolutions of which notice has been given; and without offering any opinion upon the particular scheme of which the outline is therein embraced, it cannot be irrelevant to express the hope that they may

be discussed with all the deliberation and the earnestness to which their object is so well entitled.*

* It may be convenient to subjoin a copy of the resolutions alluded to :—

“1.—That, from the sparseness of its present population, the productive capabilities of British Guiana are not sufficiently developed, and any project having for its object the increase of the population and the supply of the great want of the country—labour—deserves the encouragement of this court.

“2.—That such a wide area of fertile land, which a bountiful Providence has placed at the disposal of the British Crown, would present an attractive colonizing field to many who now inhabit densely populated countries, were the advantages afforded by British Guiana made known, and encouragement held out to free settlers.

“3.—*That no colony offers a more profitable investment for capital*, and were the Crown lands thus settled, a wider scope would be afforded for its beneficial employment in the formation or extension of Canals, Tramways, Steam Communication, the Electric Telegraph, &c., and this court therefore recommends to the Government the consideration of the question of having the Crown Lands (in certain localities to be hereafter determined on) surveyed and laid out in plots, due regard being had to highways and roads, with the view of making free grants of them to settlers, upon considerations which will insure their cultivation within a given period.

“4.—That, in anticipation of the revenues that must arise from the increased population giving increased production, in the opinion of the court, it is sound policy to foster and aid all undertakings which, although at the first tending apparently only to the advantages of the few, yet eventually and really contribute to the wellbeing of the many; and this court, therefore, will authorise advances of money (upon moderate interest, and repayable by easy instalments) to the free settlers upon Crown lands for the erection of houses, and for draining and bringing into cultivation the lands so allotted to them, such advances to be expended under official inspection, and to form a first lien upon the land and buildings until repaid with interest

“5.—That the principle of raising loans of a reproductive character having been already affirmed, and for the purpose of enabling the Government to carry out the objects indicated, this court authorises the issue, from time to time, in such sums as occasion may require, but not in the whole to exceed £1,000,000 sterling of Government Debentures, bearing interest payable half-yearly at or under the rate of six per cent. per annum, to be secured upon the revenues of the Colony, not already pledged in security for existing loans.”

RETURN OF INTERMENTS IN GEORGETOWN.

Population (1851), 25,508.

Population (1861), 29,174.

Month.	1852	1853	1854	1855	1856	1857	1858
January ..	159 ^a	207	107	114	109	300	79
February ..	225	125	77	93	129	373 ^e	72
March ..	213	144	101	99	142	171	81
April ..	150	119	92	81	143	88	83
May ..	149	94	75	83	158	116	78
June ..	109	107	57	81	186	108	91
July ..	180	135	86	87	122	163	94
August ..	159	105	83	94	115	121	106
September ..	149	139	89	72	124	96	110
October ..	136	157	76	91	104	90	111
November ..	145	110 ^b	65	96	91	92	110
December ..	203	97	88	102 ^c	119 ^d	79	111

a to *b* Yellow fever prevalent. *c* Yellow fever. *d* to *e* Cholera.MONTHLY MEANS OF TEMPERATURE IN BRITISH GUIANA, FROM
1846 TO 1857.

	1846	1847	1848	1849	1850	1851	1852	1853	1854	1855	1856	1857
January ..	79.2	77.8	77.7	78.4	77.4	78.2	78.7	79.1	77.5	80.1	79.0	77.9
February ..	79.0	77.4	77.7	78.0	78.2	78.0	78.5	79.6	77.8	78.7	79.0	77.5
March ..	79.8	77.9	78.1	78.6	78.9	78.8	78.3	80.0	79.1	78.5	79.6	77.9
April ..	80.6	78.4	79.4	78.5	79.1	79.2	79.8	80.5	79.5	79.6	80.0	79.2
May ..	80.7	78.4	78.6	78.7	78.8	78.8	79.7	79.7	79.7	80.0	79.3	78.7
June ..	79.8	78.2	78.4	77.9	79.4	78.1	78.7	79.2	79.4	79.2	78.6	78.8
July ..	79.3	78.8	79.0	77.7	79.5	80.0	79.2	79.0	78.9	79.8	78.3	78.4
August ..	79.3	80.1	80.0	79.2	79.8	79.9	80.6	81.1	80.3	80.9	79.4	79.6
September ..	81.5	80.6	80.3	80.7	82.1	80.7	81.7	79.9	81.3	81.5	80.7	—
October ..	80.0	80.5	81.4	80.9	82.3	81.0	82.0	81.4	81.5	81.0	80.5	—
November ..	80.3	80.3	80.7	79.6	81.5	80.0	80.8	80.4	80.7	81.2	79.5	—
December ..	79.0	78.9	78.4	78.5	79.9	79.4	78.2	79.9	78.6	79.8	78.1	—

Note A.

MONTHLY FALL OF RAIN AT GEORGETOWN, DEMERARA, FROM
1846 TO 1857.

			1846	1847	1848	1849	1850	1851
January	..	..	2.07	9.29	6.65	5.60	15.17	3.93
February	..	..	0.87	3.23	6.91	7.44	3.86	6.06
March	..	..	2.06	6.15	7.68	12.59	14.60	8.08
April	..	..	5.93	11.48	7.24	7.55	5.94	16.15
May	..	..	14.98	12.88	20.28	17.94	15.60	11.23
June	..	..	14.92	14.29	11.45	20.44	7.94	19.83
July	..	..	13.28	10.21	5.55	20.38	9.88	8.70
August	..	..	8.80	3.82	6.54	10.80	10.41	7.52
September	..	..	0.61	1.12	6.42	1.16	0.63	2.90
October	..	..	5.89	3.29	0.60	3.55	1.87	2.71
November	..	..	5.57	7.33	3.49	10.36	5.15	12.07
December	..	..	11.23	10.29	18.82	14.40	6.31	3.66
Total	..		86.21	93.35	101.63	132.21	97.36	102.84

			1852	1853	1854	1855	1856	1857
January	..	..	6.07	6.78	15.88	2.18	2.02	5.16
February	..	..	8.41	5.42	5.53	15.39	0.96	6.27
March	..	..	8.76	1.25	4.68	12.82	1.65	6.75
April	..	..	5.28	5.51	6.58	6.82	3.05	2.48
May	..	..	16.50	15.72	9.24	10.86	10.23	13.24
June	..	..	11.67	13.22	10.05	12.76	16.70	16.67
July	..	..	8.83	9.82	12.14	14.00	13.24	10.92
August	..	..	10.11	4.95	9.76	6.28	7.81	13.94
September	..	..	1.18	4.11	3.84	1.12	5.80	—
October	..	..	0.52	1.23	0.03	4.26	3.14	—
November	..	..	5.03	2.39	3.59	0.93	5.78	—
December	..	..	12.18	4.45	13.57	5.89	17.34	—
Total	..		94.54	74.85	94.89	93.31	87.72	

Note B.

MEMORANDUM OF EXPORTS AT VARIOUS PERIODS FROM 1747 TO 1861.

In 1747 the exports from Demerara and Essequibo were 559 tierces of sugar, which were carried to Europe in two schooners.

In 1748 (owing probably to large importations of slaves) the exports rose to 2,292 hogsheads of sugar.

In 1752 the cultivation of cotton and coffee was commenced, but only one bale of the former and one bag of the latter were exported.

In 1761 the exports were 878 hhds. sugar, 28 bales cotton, 45 tierces coffee.

In 1764 there were on the Rivers Demerara and Essequibo, 130 estates in cultivation, which loaded eight ships with the following produce:—2,956½ hhds sugar, 2 bales of cotton, 211 bags coffee.

In 1773 the exports were 3,775 hhds. sugar, 8,613 bags and 181 bales cotton, 1,001 tierces coffee.

In 1775 they were 4,939 hhds. sugar, 19,090 bags and 189 bales cotton, 2,317 tierces coffee.

In 1796 the Colony was taken possession of by the British, and in 1803 the exports were—19,638 hhds. 213 tierces, 161 barrels sugar, 4,887 puncheons rum, 46,435 bales cotton, 9,954,610 lbs. coffee, 311 casks molasses.

In 1823 the exports amounted to 51,360 hhds., 449 tierces, 2,470 barrels sugar; 15,781 puns. and 2,568 hhds. rum; 9,587 bales cotton; 8,084,729 lbs. coffee; 19,634 hhds. 230 tierces, and 269 brls. molasses.

After this, however, the cultivation of cotton and coffee began to fall off, and even that of sugar experienced an alarming reverse. Comparing 1829 with 1849 there was a gross deficiency, in the return for the last mentioned year, of 43,086,763 lbs. sugar, 2,139,430 lbs. coffee, or nearly the *whole* crop of coffee; while cotton, of which 1,596,171 lbs. were exported in 1829, was not an article of export at all in 1849!

During the years 1851, 1852, 1853, owing chiefly to the resumption of immigration from India, the exports of sugar were again improved in quantity; but the average prices of muscovado sugar in London, as quoted from the *London Gazette* for those years, show that

the returns to the proprietors of estates had not improved in the like ratio.

1851	.....	25s. 6d. per cwt.—Ex. duty.
1852	.....	22s. 5d. „ „
1853	.....	24s. 6d. „ „

In the year 1848 the exports were 46,610 hhds. of sugar, 23,890 puns. of rum, 10,716 casks of molasses, and 181,709 lbs. coffee. In 1858 the exports of sugar and rum had increased respectively to 58,917 hhds. and 26,653 puns., with 3,416 casks of molasses, and *no* coffee.

In 1861, they stood at 72,347 hhds. sugar, 30,264 puns. rum, 3,477 casks molasses, and 825,023 cubic feet timber.

In 1866 they had increased to 91,580 hhds. sugar, 30,612 puns. rum, and 15,180 casks molasses. The export of timber, owing to an unprecedented fall in price, had decreased to 249,614 cubic feet.

Note C.

TABLE SHOWING THE SPECIFIC GRAVITY OF 59 SPECIMENS OF WOODS.

DEMERARA, *February 27th*, 1862.

J. BRUMELL, Esquire, Secretary to the Committee for the Exhibition of 1862.

SIR,—I beg to send to you, herewith, 59 small specimens of different kinds of timber, the produce of this Colony; and on the other side you have a list of them with their specific gravities, as ascertained by me. Mr. HUNTER was good enough to procure them and name them for me for this purpose.

The specific gravities can, of course, only be approximations; so much depends upon whether the wood be green or well-cured; or whether the specimen be cut from the heart or near the sap. These specimens are well-cured; but some are very much older than others.

All the specimens classified above the word “Water,” on the list, should sink; but I have seen well-cured *mora* float. And all the specimens following the word “Water” on the list should float. But

“Yellow Greenheart” and “Wallaba,” when first brought to town by the timber-cutters, almost invariably sink.

I am, Sir, yours most obediently,

JOHN FRED. BOURNE,

Colonial Civil Engineer.

No.	NAME.	Specific Gravity.	No.	NAME.	Specific Gravity.
1	Letter Wood	1·333	30	Bartaballi	·893
	<i>Same sp. gr. as Lignum Vitæ.</i>		31	Houbaballi	·890
	<i>Dutch Box</i> .. 1·328		32	Kirica	·889
2	Tibiensi	1·325	33	Tryssil	·888
3	Banya	1·280	34	Fustic	·884
4	Greenheart, Black ..	1·210	35	Sunwood	·863
	<i>Heart of Oak</i> .. 1·170			<i>Beech</i>	·852
5	Washiba	1·162		<i>Ash</i>	·845
6	Cabacalli	1·154	36	Locust, White	·838
7	Ducaballi	1·138	37	Itikiribouraballi	·836
8	Hackia	1·132	38	Suradani	·836
9	Moraballi	1·128	39	Hyraballi, Brown ..	·836
10	Eleetewcira	1·122	40	Purpleheart	·827
11	Wamara	1·122	41	Wild Cashew	·812
	<i>Ebony</i> 1·117		42	Mamnee	·809
12	Tooroo	1·110		<i>Alder</i>	·800
13	Coutaballi	1·087	43	Coffee	·783
14	Couraballi	1·082	44	Lancewood	·782
15	Sibbadani	1·066	45	Cherry	·767
16	Silbadani	1·066		<i>Maple</i>	·755
17	Awasurali	1·058	46	Duca	·746
18	Hyawaballi	1·032	47	Euraballi	·744
	<i>Red Brazil-wood</i> 1·031		48	Yellow Sanders	·734
19	Mora	1·029	49	Arumata	·727
20	Cururuburari	1·021	50	Arawadani	·724
21	Baramali	1·007	51	Lime	·706
			52	Guava	·682
			53	Arracudoccu	·678
				<i>Walnut and Elm</i> ..	·671
22	Hicka	·994	54	Crabwood	·667
23	Logwood	·982	55	Douru	·652
24	Touranero	·967	56	Silverballi, Yellow ..	·610
25	Greenheart, Yellow ..	·951	57	Courneuralli	·592
26	Wallaba	·945		<i>Willow</i>	·585
27	Locust, Red	·942	58	Silverballi, Grey	·564
28	Souari	·932		<i>Fir</i>	·550
	<i>Dry Oak</i>	·925	59	Silverballi, Pale	·483
29	Culisciri	·923		<i>Corkwood</i>	·240

CATALOGUE.

SECTION A.*

SACCHARINE PRODUCTS AND ARTICLES OF FOOD.

NOTE.—The samples of sugar from No. 1 to 36 are all Vacuum-pan Sugars, and in no case has animal charcoal been used in the manufacture.

- 1.—SUGAR, V. P. Average sample of crop of 1,500 tons, from Plantation *Schoon-Oord*. Contributed by Heirs of SAMUEL BARBER, and E. G. BARR.
- 2.—DITTO, DITTO. Average sample of crop of 1,500 tons, from Plantation *Schoon Oord*. Contributed by Heirs of SAMUEL BARBER, and E. G. BARR.
- 3.—DITTO, DITTO. From Plantation *Cuming's Lodge*. Contributed by HENRY CLEMENTSON.
- 4.—DITTO, DITTO. As exported. From Plantation *Cuming's Lodge*. Contributed by HENRY CLEMENTSON.
- 5.—DITTO, DITTO. Washed in Centrifugals. From Plantation *Albion*. Contributed by THE COLONIAL COMPANY.
- 6.—DITTO, DITTO. As exported. From Plantation *Albion*. Contributed by THE COLONIAL COMPANY.
- 7.—DITTO, DITTO. As exported. From Plantation *Haarlem*. Contributed by THE COLONIAL COMPANY.

* In all cases where the name of the contributor is not stated, the articles have been collected for, and are exhibited by, the "COMMITTEE OF CORRESPONDENCE OF THE ROYAL AGRICULTURAL AND COMMERCIAL SOCIETY OF BRITISH GUIANA."

- 8.—SUGAR, V. P. As exported. From Plantation *Haarlem*. Contributed by THE COLONIAL COMPANY.
- 9.—DITTO, DITTO. As exported. Cured without liquoring. From Plantation *Peters' Hall*. Contributed by THE COLONIAL COMPANY.
- 10.—DITTO, DITTO. As exported. Cured without liquoring. From Plantation *Peters' Hall*. Contributed by THE COLONIAL COMPANY.
- 11.—DITTO, DITTO. As exported. Cured without liquoring. From Plantation *Peters' Hall*. Contributed by THE COLONIAL COMPANY.
- 12.—DITTO, DITTO. From Plantation *Success*. Contributed by THE COLONIAL COMPANY.
- 13.—DITTO, DITTO. As exported. From Plantation *Success*. Contributed by THE COLONIAL COMPANY.
- 14.—DITTO, DITTO. From Plantation *Bee Hive*. Contributed by THOS. DANIEL.
- 15.—DITTO, DITTO. As exported. From Plantation *Bee Hive*. Contributed by THOS. DANIEL.
- 16.—DITTO, DITTO. From Plantation *Château Margot*. Contributed by THOS. DANIEL.
- 17.—DITTO, DITTO. As exported. From Plantation *Château Margot*. Contributed by THOS. DANIEL.
- 18.—DITTO, DITTO. As exported. Cured without liquoring. From Plantation *Château Margot*. Contributed by THOS. DANIEL.
- 19.—DITTO, DITTO. From Plantation *Montrose*. Contributed by JAS. EWING and Co.
- 20.—DITTO, DITTO. As exported. From Plantation *Montrose*. Contributed by JAS. EWING and Co.
- 21.—DITTO, DITTO. As exported. From Plantation *Enterprise*. Contributed by A. and H. T. GARNETT.
- 22.—DITTO, DITTO. As exported. From Plantation *Enterprise*. Contributed by A. and H. T. GARNETT.

- 23.—SUGAR, V. P. From Plantation *Hope*. Contributed by JOHN JONES.
- 24.—DITTO, DITTO. As exported. From Plantation *Hope*. Contributed by JOHN JONES.
- 25.—DITTO, DITTO. From Plantation *Enmore*. Contributed by the Heirs of H. PORTER.
- 26.—DITTO, DITTO. As exported. From Plantation *Enmore*. Contributed by the Heirs of H. PORTER.
- 27.—DITTO, DITTO. From Plantation *Enmore*. Contributed by the Heirs of H. PORTER.
- 28.—DITTO, DITTO. As exported. From Plantation *Enmore*. Contributed by the Heirs of H. PORTER.
- 29.—DITTO, DITTO. From Plantation *Anna Catharina*. Contributed by SANDBACH and TINNÉ.

NOTE.—A sample of this sugar obtained the prize at the Local Exhibition as the best sugar that could be made.

- 30.—DITTO, DITTO. As exported. From Plantation *Anna Catharina*. Contributed by SANBACH and TINNÉ.

NOTE.—A sample of this sugar obtained the second prize at the Local Exhibition in December, 1866, for sugars as exported.

- 31.—DITTO, DITTO. Cured without liquoring. From Plantation *Anna Catharina*. Contributed by SANBACH and TINNÉ.

- 32.—DITTO, DITTO. As exported. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.

NOTE.—A sample of this sugar obtained the first prize at the Local Exhibition in December, 1866, for sugars as exported.

- 33.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.

- 34.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.

- 35.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.

- 36.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.

MUSCOVADO. *Note*.—The samples of sugar from No. 37 to 58 are all (with the exception of Nos. 55 and 56) common process sugars. It is, however, to be stated that in the first nine bisulphite of lime was used in the manufacture.

- 37.—SUGAR, C. P. From the Plantation *Goldstone Hall*. Contributed by THE COLONIAL COMPANY.
- 38.—DITTO, DITTO. From Plantation *Tuschen de Vrienden*. Contributed by JOHN McCONNELL.
- 39.—DITTO, DITTO. From Plantation *Tuschen de Vrienden*. Contributed by JOHN McCONNELL.
- 40.—DITTO, DITTO. From Plantation *Adelphi*. Contributed by the Representatives of P. NICHOLSON.
- 41.—DITTO, DITTO. From Plantation *Ruimveldt*. Contributed by C. J. VAN DER OUDERMEULEN.

NOTE.—A sample of this sugar obtained the second prize at the Local Exhibition in December, 1866, for common process sugars, treated with bisulphite of lime in the manufacture.

- 42.—DITTO, DITTO. From Plantation *Smythfield*. Contributed by WILLIAM M. ROSS.
- 43.—DITTO, DITTO. From Plantation *Vergenoegen*. Contributed by R. SMITH and DAVID VYFHUIS.
- 44.—DITTO, DITTO. From Plantation *Cornelia Ida*. Contributed by the PROPRIETORS of the Estate.
- 45.—DITTO, DITTO. From Plantation *Cornelia Ida*. Contributed by the PROPRIETORS of the Estate.

NOTE.—A sample of this sugar obtained the first prize at the Local Exhibition in December, 1866, for common process sugars, treated with bisulphite of lime in the manufacture.

- 46.—DITTO, DITTO. From Plantation *Blairmont*. Contributed by H. S. BLAIR.
- 47.—DITTO, DITTO. From Plantation *Taymouth Manor*. Contributed by THOS. DANIEL.
- 48.—DITTO, DITTO. From Plantation *Rose Hall*. Contributed by H. and W. DAVIDSON.
- 49.—DITTO, DITTO. From Plantation *Rose Hall*. Contributed by H. and W. DAVIDSON.

- 50.—SUGAR, C. P. From Plantation *Nismes*. Contributed by
W. D. ELLIOT and R. LORIMER.

NOTE.—A sample of this sugar obtained the first prize at the Local
Exhibition in December, 1866, for sugars made entirely by the
common process.

- 51.—DITTO, DITTO. From Plantation *Nismes*. Contributed by
W. D. ELLIOT and R. LORIMER.

- 52.—DITTO, DITTO. From Plantation *Nismes*. Contributed by
W. D. ELLIOT and R. LORIMER.

- 53.—DITTO, DITTO. From Plantation *Hope and Experiment*.
Contributed by McCALMONT.

- 54.—DITTO, DITTO. From Plantation *Ruimveldt*. Contributed
by C. J. VAN DER OUDERMEULEN.

- 55.—DITTO, DITTO. Sugar made from Molasses with the use of
the Vacuum-pan. From Plantation *Great Diamond*. Con-
tributed by the Heirs of STEELE and LOXDALE.

- 56.—DITTO, DITTO. Sugar made from Molasses with the use of
the Vacuum-pan. From Plantation *Great Diamond*. Con-
tributed by the Heirs of STEELE and LOXDALE.

- 57.—DITTO, DITTO. From Plantation *Zeeburg*. Contributed by
P. M. WATSON and A. McLAREN.

- 58.—DITTO, DITTO. From Plantation *De Willem*. Contributed
by the Heirs of J. LAURIE.

- 59.—RUM, COLOURED. From Plantation *Schoon Oord*. Con-
tributed by the Heirs of SAMUEL BARBER, and E. G. BARR.

- 60.—DITTO, UNCOLOURED. From Plantation *Schoon Oord*.
Contributed by the Heirs of SAMUEL BARBER, and E. G. BARR.

- 61.—DITTO, COLOURED. 48 per cent. over proof. From Plan-
tation *La Grange*. Contributed by H. S. BASCOM.

NOTE.—A sample of this rum obtained the first prize at the Local
Exhibition in December, 1866.

- 62.—DITTO, DITTO. From Plantation *Blairmont*. Contributed by
H. S. BLAIR.

- 63.—DITTO, DITTO. From Plantation *Blairmont*. Contributed
by H. S. BLAIR.

- 64.—DITTO, UNCOLOURED. From Plantation *Blairmont*. Con-
tributed by H. S. BLAIR.

- 65.—RUM, COLOURED. From Plantation *Cuming's Lodge*. Contributed by HENRY CLEMENTSON.
- 66.—DITTO, DITTO. 40 per cent. over proof. From Plantation *Goldstone Hall*. Contributed by THE COLONIAL COMPANY.
- 67.—DITTO, UNCOLOURED. From Plantation *Goldstone Hall*. Contributed by THE COLONIAL COMPANY.
- 68.—DITTO, COLOURED. From Plantation *Bee Hive*. Contributed by THOMAS DANIEL.
- 69.—DITTO, UNCOLOURED. From Plantation *Bee Hive*. Contributed by THOMAS DANIEL.
- 70.—DITTO, COLOURED. From Plantation *Taymouth Manor*. Contributed by THOMAS DANIEL.
- 71.—DITTO, DITTO. 40 per cent. over proof. From Plantation *Rose Hall*. Contributed by H. and W. DAVIDSON.
- 72.—DITTO, UNCOLOURED. 45 per cent. over proof. From Plantation *Rose Hall*. Contributed by H. and W. DAVIDSON.
- 73.—DITTO, COLOURED. From Plantation *Nismes*. Contributed by W. D. ELLIOT and R. LORIMER.
- 74.—DITTO, UNCOLOURED. From Plantation *Nismes*. Contributed by W. D. ELLIOT and R. LORIMER.
- NOTE.—A sample of this rum obtained the second prize at the Local Exhibition in December, 1866.
- 75.—DITTO, COLOURED. 48 per cent. over proof. From Plantation *Montrose*. Contributed J. EWING and Co.
- 76.—DITTO, UNCOLOURED. 44 per cent. over proof. From Plantation *Montrose*. Contributed by J. EWING and Co.
- 77.—DITTO, COLOURED. From Plantation *Mon Repos*. Contributed by the Representative of J. HAMER.
- 78.—DITTO, DITTO. From Plantation *Hope*. Contributed by JOHN JONES.
- 79.—DITTO, UNCOLOURED. From Plantation *Hope*. Contributed by JOHN JONES.
- 80.—DITTO, COLOURED. 42 per cent. over proof. From Plantation *Hope and Experiment*. Contributed by H. McCALMONT.
- 81.—DITTO, UNCOLOURED. 42 per cent. over proof. From Plantation *Hope and Experiment*. Contributed by H. McCALMONT.

- 82.—RUM, COLOURED. 48 per cent. over proof. From Plantation *Adelphi*. Contributed by the Representative of P. NICHOLSON.
- 83.—DITTO, UNCOLOURED. 53 per cent. over proof. From Plantation *Adelphi*. Contributed by the Representative of P. NICHOLSON.
- 84.—DITTO, COLOURED. Contributed by S. R. PONTIFEX, Georgetown.
- 85.—DITTO, UNCOLOURED. Contributed by S. R. PONTIFEX, Georgetown.
- 86.—DITTO, COLOURED. From Plantation *Anna Catharina*. Contributed by SANDBACH and TINNÉ.
- 87.—DITTO, UNCOLOURED. From Plantation *Anna Catharina*. Contributed by SANDBACH and TINNÉ.
- 88.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.
- 89.—DITTO, DITTO. Nine years old. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.
- 90.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.
- 91.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.
- 92.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.
- 93.—DITTO, DITTO. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.
- 94.—DITTO, DITTO. Nine years old. From Plantation *Great Diamond*. Contributed by the Heirs of STEELE and LOXDALE.
- 95.—STARCH, ARROW-ROOT (*Maranta arundinacea*, Lin.), from root of. Contributed by Mrs. F. CLARK, Berbice.
- 96.—DITTO, DITTO. Contributed by CHARLES GRANT, Berbice.
- 97.—DITTO, DITTO. Contributed by ROBT. GARRAT, Demerara River.
- 98.—DITTO, DITTO. Contributed by Mrs JANSSEN, Berbice.

- 99.—STARCH, ARROWROOT. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 100.—DITTO, DITTO. Contributed by MARGARET INNIS, Berbice.
- 101.—DITTO, DITTO. Contributed by Mrs. MERRIMAN, Berbice.
- 102.—DITTO, DITTO. Contributed by J. A. RUSSELL, Berbice.
- 103.—DITTO, DITTO. Contributed by Miss REISS, Plantation *Klein Pouderoyen*.
- 104.—DITTO, DITTO. Contributed by Dr. SHIER, Georgetown.
- 105.—DITTO, DITTO. Contributed by ALEX. WINTER. Plantation *Hope and Experiment*.
- 106.—DITTO, CASSAVA (BITTER) (*Janipha Manihot*, H. B.), from corm, or root of. Contributed by LOUISA INNIS, Berbice.
- 107.—DITTO, DITTO. Contributed by MARIANN JANSEN, Berbice.
- 108.—DITTO, DITTO. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 109.—DITTO, DITTO. Contributed by Miss E. REISS. Plantation *Klein Pouderoyen*.
- 110.—DITTO, DITTO. Contributed by Dr. SHIER, Georgetown.
- 111.—DITTO, DITTO (SWEET) (*Janipha Loefflingii*, H. B.). From corm, or root of. Contributed by Mrs. CLARK, Berbice.
- 112.—DITTO, DITTO. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 113.—DITTO, DITTO. Contributed by Dr. SHIER, Georgetown.
- 114.—DITTO, TANNIA (*Caladium*, or *Colocasia*, Sp. ?), from roots of. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 115.—DITTO, DITTO. Contributed by J. J. LEPS, Berbice.
- 116.—DITTO, DITTO. Contributed by Dr. SHIER, Georgetown.
- 117.—DITTO, YAM, Common (*Dioscorea sativa*, Lin.), from root of. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 118.—DITTO, DITTO. Contributed by Dr. SHIER, Georgetown.
- 119.—DITTO, DITTO (Guinea) (*Dioscorea Sp?*), from root of. Contributed by Dr. SHIER, Georgetown.

- 120.—STARCH, YAM, BUCK (*Dioscorea triphylla*, *Lin.* ?), from root of. Contributed by Dr. SHIER, Georgetown.
- 121.—DITTO, SWEET POTATO (*Batatas edulis*, *Chois.*), from root of. Contributed by Dr. SHIER, Georgetown.
- 122.—DITTO, DITTO. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 123.—DITTO, TOUS LES MOIS, or "BUCK SHOT" (*Canna Sp.* ?), from roots of. Contributed by Miss REISS, Plantation *Klein Pouderoyen*.
- 124.—DITTO, DITTO. Contributed by ROBT. SMITH, Plantation *Cornelia Ida*.
- 125.—DITTO, PLANTAIN (*Musa Paradisiaca*, *Lin.*), from unripe fruit of. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 126.—DITTO, DITTO. Contributed by Dr. SHIER, Georgetown.
- 127.—DITTO, BANANA (*Musa sapientum*, *Lin.*), from unripe fruit of. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 128.—DITTO, BREAD FRUIT (*Artocarpus incisa*, *Lin.*), from the unripe Sorosis or fruit. Contributed by B. W. LEPS, Berbice.
- 129.—DITTO, MANGO (*Mangifera indica*, *Lin.*), from unripe fruit of. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 130.—DITTO, PUMPKIN (*Cucurbita Pipo*, *Lin.*), from unripe fruit of. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.
- 131.—FLOUR, CASSAVA, BITTER (*Janipha Manihot*, *H. B.*), from dried roots of. Contributed by CHARLES INNIS, Berbice.
- 132.—DITTO, DITTO. Contributed by JOHN INNIS, Berbice.
- 133.—DITTO, DITTO. Contributed by LOUISA INNIS, Berbice.
- 134.—DITTO, DITTO. Contributed by MICHAEL INNIS, Berbice.
- 135.—DITTO, DITTO. Contributed by MARGARET INNIS, Berbice.
- 136.—DITTO, DITTO. Contributed by PARIS INNIS, Berbice.
- 137.—DITTO, DITTO. Contributed by RICHARD INNIS, Berbice.
- 138.—DITTO, DITTO. Contributed by Mrs. JANSEN, Berbice.

- 139.—FLOUR, CASSAVA. Contributed by WILLIAM JANSEN, Berbice.
- 140.—DITTO, DITTO. Contributed by PERCIVAL JANSEN, Berbice.
- 141.—DITTO, DITTO. Contributed by ROBERT JANSEN, Berbice.
- 142.—DITTO, DITTO. Contributed by Miss REISS, Plantation
Klein Pouderoyen.
- 143.—DITTO, DITTO, SWEET (*Janipha Læflingii*, H. B.), from the
dried roots of. Contributed by Dr. SHIER, Georgetown.
- 144.—DITTO, DITTO. Contributed by Miss E. J. JOHNSON,
Mahaiconi.
- 145.—DITTO, DITTO. Contributed by WILLIAM JANSEN, Berbice.
- 146.—DITTO, DITTO. Contributed by ELIZABETH MEREDITH,
Berbice.
- 147.—DITTO, DITTO. Contributed by Miss REISS, Plantation
Klein Pouderoyen.
- 148.—DITTO, DITTO. Contributed by SARAH DUNVIN.
- 149.—DITTO, DITTO. Contributed by EMMALINE GORING.
- 150.—DITTO, HOG TANNIA (*Caladium*, or *Colocasia*, Sp. ?), from
dried roots of. Contributed by Dr. SHIER, Georgetown.
- 151.—MEAL, CASSAVA, bitter, (*Janipha Manihot*, H. B.), from
dried roots of. Contributed by LOUISA INNIS, Berbice.
- 152.—DITTO, DITTO. Contributed by MARGARET INNIS, Berbice.
- 153.—DITTO, DITTO. Contributed by HARRIET INNIS, Berbice.
- 154.—DITTO, DITTO. Contributed by WILLIAM JANSEN, Berbice.
- 155.—DITTO, DITTO. Contributed by MARIANN INNIS, Berbice.
- 156.—DITTO, DITTO, SWEET (*Janipha Læflingii*, H. B.), from
dried roots of. Contributed by HARRIET INNIS, Berbice.
- 157.—MEAL, PLANTAIN, or "Conquintay," from the sliced and
dried unripe fruit of *Musa Paradisiaca*. Contributed by Dr.
SHIER, Georgetown.
- 158.—DITTO, DITTO. Contributed by Mrs. E. J. JOHNSON,
Mahaiconi.
- 159.—DITTO, DITTO. Contributed by ELIZABETH MEREDITH,
Berbice.

- 160.—MEAL, PLANTAIN. Contributed by PERCIVAL JANSEN, Berbice.
- 161.—DITTO, DITTO. Contributed by LOUISA INNIS, Berbice.
- 162.—DITTO, DITTO. Contributed by JOHN INNIS, Berbice.
- 163.—DITTO, DITTO. Contributed by Miss REISS, Plantation *Klein Pouderoyn*.
- 164.—CASSAVA, BITTER, corms or roots of. Sliced and dried. Contributed by Dr. SHIER, Georgetown.
- 165.—DITTO, SWEET, corms or roots of. Sliced and dried. Contributed by Dr. SHIER, Georgetown.
- 166.—PLANTAIN (*Musa Paradisica*), unripe fruit of. Sliced and dried.
- 167.—TAPIOCA, from the corms or roots of the Bitter Cassava. Contributed by J. A. RUSSELL, Berbice.
- 168.—PLANTAINS, RIPE. Contributed by Miss REISS, Plantation *Klein Pouderoyn*.
- 169.—BANANAS, RIPE, dried. Contributed by Miss REISS, Plantation *Klein Pouderoyn*.

NOTE.—For information regarding starches, &c. See Preface, p. li. : *et seq.*

- 170.—CASSAREEP, the inspissated juice of the roots of Bitter Cassava. Contributed by THE CORRESPONDENCE COMMITTEE of the Royal Agricultural and Commercial Society :—Cassareep is much used as the basis of sauces, and in this Colony in the preparation of pepper-pot, &c. The late Dr. SHIER, in his report ‘On the Starch producing Plants of British Guiana,’ notices it as follows :—“To those who have never visited the tropics it may be proper to notice that Cassareep is the concentrated juice of the roots of Bitter Cassava, and the basis of the West Indian dish, *Pepper-pot*. One of its most remarkable properties is its high antiseptic power, preserving any meat that may be boiled in it for a much longer period than can be done by any other culinary process. Cassareep was originally a ‘Buck’ or Indian preparation, and has often been described with more or less accuracy.” It is well known that some of the Dutch planters of this Colony have, by means of the addition of a small quantity of Cassareep, from time to time, to varieties of animal food, been enabled to keep up, in daily use, the same pepper-pot for several years.

- 171.—CACAO, or COCOA SEEDS (*Theobroma Cacao*, *Lin.*), from which Chocolate is prepared. Contributed by Miss REISS. Plantation *Klein Pouderojen*.
- 172.—CHOCOLATE. Contributed by ALEXANDER WINTER, Berbice.
- 173.—RICE, in husk, or "PADDY" (*Oryza sativa*, *Lin.*). Contributed by WILLIAM RUSSELL, Plantation *Leonora*.
- 174.—DITTO, DITTO. Contributed by WILLIAM GREY, Plantation *Montrose*.
- 175.—DITTO, DITTO, (in bunches). Contributed by A. BECKWITH, Mahaiconi.
- 176.—DITTO, Husked. Contributed by WILLIAM RUSSELL, Plantation *Leonora*.
- 177.—DITTO, DITTO. Contributed by WILLIAM GREY, Plantation *Montrose*.
- 178.—DITTO, DITTO. Contributed by ELIZABETH MEREDITH, Berbice.
- 179.—DITTO, DITTO. Contributed by WILLIAM JANSEN, Berbice.
- 180.—DITTO, DITTO. Contributed by CHARLES GRANT, Berbice.
- 181.—COFFEE BEANS (*Coffea Arabica*, *Lin.*). Contributed by WILLIAM FRESSON, Georgetown.
- 182.—DITTO, DITTO. Contributed by WILLIAM FRESSON, Georgetown.
- 183.—DITTO, DITTO. Contributed by THE CORRESPONDENCE COMMITTEE.
- 184.—DITTO, DITTO. Contributed by Miss REISS, Plantation *Klein Pouderojen*.
- 185.—DITTO, DITTO. Contributed by BENJAMIN SIMON, Berbice.
- 186.—DITTO, DITTO. Contributed by Mrs. CÆSAR, Demerara River.
- 187.—OCHRO SEEDS (*Hibiscus esculentus*, *Lin.*). Used in soups. Contributed by J. A. RUSSELL, Berbice.
- 188.—DITTO, DITTO, Parched. Used as a substitute for Coffee. Contributed by J. A. RUSSELL, Berbice.

- 189.—SORREL SEEDS (*Hibiscus Sabdariffa*, *Lin.*). Contributed by J. A. RUSSELL, Berbice.
- 190.—SORREL CAPSULES, Dried. Contributed by J. A. RUSSELL, Berbice. Infusion used as an acid drink.
- 191.—PEASE, PIGEON (*Cajanus flarus*, *De Cand.*). Contributed by J. A. RUSSELL, Berbice. Extensively used as an article of food.
- 192.—PEASE, Incease (*Dolichos sesquipedalis*, *Lin.*). Contributed by J. A. RUSSELL, Berbice. Used as an article of food.
- 193.—PEASE, Black Eye (*Dolichos sphaerospermis*, *De Cand.*). Contributed by J. A. RUSSELL, Berbice. Used as an article of food.

NOTE.—Subsequently to the close of the Local Exhibition, and unfortunately too late for the purpose intended, two samples of meal were received from Mr. Stevenson, a teacher among the Indians on the River Berbice. One was prepared from Colony-grown rice, the other from Colony-grown corn in its unripe state, and both specimens have been much admired; the corn flour was considered equal to "Brown and Polson's," largely imported into the Colony as food; the rice flour had as fine a grain as arrow-root.—*Local paper.*

SECTION B.

FIBROUS SUBSTANCES.

- 1.—PLANTAIN FIBRE (*Musa Paradisiaca*, *Lin.*). Contributed by A. BECKWITH, Mahaiconi.

NOTE.—A sample of this fibre obtained a prize at the Local Exhibition held in Georgetown in December, 1866.

- 2.—DITTO, DITTO. Collected by W. C. McCLINTOCK for the CORRESPONDENCE COMMITTEE of the Royal Agricultural and Commercial Society. From the neighbourhood of the Pomeroon River.

- 3.—SILK GRASS, or CORAWA FIBRE (*Bromelia Karatas*, *Lin.*). Contributed by W. S. RUTHERFORD. It is very strong, and is used by the Indians for bow-strings, nets, fishing-lines, ropes, &c.

NOTE.—A sample of this fibre obtained a prize at the Local Exhibition in December, 1866.

- 4.—TIBISIRI FIBRE (*Mauritia flexuosa*, *Lin.*). Collected by W. C. McCLINTOCK for the CORRESPONDENCE COMMITTEE. It is obtained from the inner surface of the spiral leaves of the Ita Palm, and is used by the Indians for making hammocks, &c. It is very durable except in damp situations, and can be obtained in large quantities all the year round.

NOTE.—A sample of this fibre obtained a prize at the Local Exhibition in December, 1866.

- 5.—MAHOE FIBRE (*Thespesia populnea*, *Correa*, or *Hibiscus elatus*, *Lin.*). Contributed by the CORRESPONDENCE COMMITTEE.

- 6.—MORA HAIR (*Tillandsia usneoides*, *Lin.*). From the Canje Creek. Contributed by Dr. SHIER, Georgetown. This epiphyte is abundant in many of the creeks of the Colony. It is prepared by steeping in water till the epidermis can be readily separated. The fibre is black and resembles horse-hair, and is used for stuffing sofas, mattresses, &c.

NOTE.—A sample of this fibre obtained a prize at the Local Exhibition in December, 1866.

- 7.—MORA HAIR (*Tillandsia usneoides*). Contributed by E. J. JOHNSON, Mahaiconi.
- 8.—COTTON (CREOLE) (*Gossypium arboreum*, Lin.). Contributed by W. JANSEN, Berbice.
- 9.—DITTO, DITTO. Contributed by P. P. FAIRBURN, and grown at Plantation *Whim*, Corentyn Coast, Berbice.
- 10.—DITTO (SEA ISLAND). Contributed by ALEX. WINTER, and grown at Plantation *Hope and Experiment*, West Coast, Berbice.
- 11.—DITTO (CREOLE). Contributed by ALEX. WINTER, and grown at Plantation *Hope and Experiment*, Berbice.
- 12.—DITTO (INDIAN). Collected by W. C. McCLINTOCK for the CORRESPONDENCE COMMITTEE, and grown on the high lands at the Upper Barama Creek, River Wai-ini, about 150 miles from the sea. *Cultivated by Acawai Indians*.
- NOTE.—A sample of this Cotton obtained a prize at the Local Exhibition in December, 1866.
- 13.—DITTO, DITTO. Collected by W. C. McCLINTOCK for the CORRESPONDENCE COMMITTEE, and grown *by the Indians* on the high lands, River Wai-ini, distant from the sea about 200 miles.
- 14.—DITTO (CREOLE). Contributed by the CORRESPONDENCE COMMITTEE.
- 15.—CUCURIT, or KOQUERIT PALM FIBRE (*Maximiliana regia*, Mart.). Collected by W. C. McCLINTOCK for the CORRESPONDENCE COMMITTEE. This ornamental Palm is to be found in large numbers in almost all parts of Guiana. Some Indian tribes extract from this Palm a kind of flour which has a saline taste, and with which they season their food.
- NOTE.—A sample of this Fibre obtained a prize at the Local Exhibition in December, 1866.
- 16.—WINNA FIBRE, the inner bark of the Cacaralli tree (*Lecythis Ollaria*, Lin.). Collected by W. C. McCLINTOCK for the CORRESPONDENCE COMMITTEE. It is used by the Indians to wrap their cigars.
- 17.—HORSE-EYE BUSH ROPE FIBRE. Contributed by the Rev. J. KETLEY, Georgetown. This fibre is valuable because of its length and strength. The fibre made from the bark is remarkable for its silken fineness.

18.—DITTO, STEM. Contributed by the Rev. J. KETLEY, Georgetown. From this the fibre (No. 17) is made.

19.—COIL OF ROPE. Contributed by ALEX. WINTER, Berbice, and made from the fibre of the Wild Ochro, sometimes called "jumby ochro" (*Urena, Sp. ?*) This rope was made at Plantation *Hope and Experiment*, where it is used in packing bales of cotton. The Wild Ochro is found in abundance all over the Colony, and the process for preparing the fibre is simple and inexpensive.

NOTE.—This obtained a prize at the Local Exhibition in December, 1866.

20.—JUMBY OCHRO, or WILD OCHRO FIBRE (*Urena Sp. ?*). Contributed by A. BECKWITH, Mahaiconi.

NOTE.—A sample of this Fibre obtained a prize at the Local Exhibition in December, 1866.

21.—DITTO, DITTO. Contributed by E. J. JOHNSON, Mahaiconi.

22.—MAHOE FIBRE. See No. 5. Contributed by E. J. JOHNSON, Mahaiconi.

23.—FIBRE, from the Ita Palm (*Mauritia flexuosa, Lin.*). Contributed by W. C. McCLINTOCK, Pomeroon. It has been stated (see No. 4) that Tibusiri Fibre is obtained from the inner surface of the spiral leaves of this palm. After its removal a large quantity of refuse fibre remains, which at present is allowed to rot on the ground. It is in the hope that some useful application may be found, such as paper-making, or textile fabric, for the rendering useful of this abundant material, that the specimen is now forwarded.

SECTION C.

CHEMICAL AND PHARMACEUTICAL ARTICLES AND PRODUCTS.

- 1.—CRAB OIL. Contributed by WILLIAM FRESSON, Georgetown.
Obtained from the seeds of the tree yielding crabwood (*Carapa Guianensis*, Aubl.). It is used in the Colony for burning, and is highly esteemed as an oil for the hair. It is also used with great effect in certain skin-diseases of horses, cattle, and dogs.
- 2.—DITTO, DITTO. Contributed by CHARLES GRANT, Berbice.
- 3.—LAUREL OIL. Contributed by WILLIAM FRESSON, Georgetown.
This oil, supposed to be obtained from the *Oreodaphne opifera*, Nees., is extensively used by natives in affections of the joints, and in rheumatism. It is also an admirable solvent of india-rubber. A section of the stem of the tree has been forwarded for examination. See Section D, No. 29. A sample of the oil was forwarded to the London International Exhibition of 1862, by W. H. CAMPBELL, LL.D., Georgetown, and was accompanied with the subjoined information as to the mode of obtaining it from the tree. Señor Francisco Jose Silva, who has resided for many years on the lower Orinoco, states that the Sassafras or Laurel Oil is obtained from the tree which yields it, by boring an auger-hole to the heart. The operation must be performed when the moon is on the increase. It is not every tree that produces oil, but those which contain it begin to yield it as soon as the auger reaches the vein (heart?) The oil is received in a basin and does not require any purification or preparation, such as filtering, boiling, &c. The memorandum in Spanish which accompanied this specimen is as follows:—A solicitud del Señor F. W. BEHRENS, vecino de Puerto de Tablas en la provincia de Guayana, Republica de Venezuela, day los informes siguientes. Para producir ó ganar el Aceite de Sassafras, se pica ó barrena la mata, hásta llegar a su corazon. Esta operacion se hace en tiempc de la creciente de la luna. No todas las matas producen Aceite, peso los arboles que tienen, empiezan echarlo, enando ha llegado el barreno á la vena. Este Aceite se recoje, y no necesita de otra operacion,

no se cocina, ni se filtra. He vivido muchos años en el bajo Orinoco y me he ocupado en estos trabajos; y day los informes asila dichos, para los partes interesados, y firma la presente en Ciudad Bolivar; Febrero 20 de 1861.”—FRANCISCO JOSE SILVA.

- 4.—BALATA. The inspissated juice of the Bully Bullet, or Burueh tree (*Sapota Mulleri* or *Mimusops Baláta*, Gaert. *Achras Baláta*, Aubl.?) Contributed by DAVID A. MELVILLE, Berbice. For full information relating to this substance, see Mr. MELVILLE's communication in the Preface, p. lxvii.
- 4a.—BARK of the BULLY TREE. Contributed by DAVID A. MELVILLE, Berbice. From this specimen of Bark the milk has not been allowed to flow, and in its solid state it may be seen in the inner layers of Bark.
- 5.—BALATA. Contributed by E. J. JOHNSON, Mahaiconi.
- 6.—GUM ANIMI, or GUM RESIN, from the Simiri or Locust Tree (*Hymenaea Courbaril*, Lin.). Contributed by DAVID A. MELVILLE, Berbice. This gum is obtained by digging in the vicinity of the roots of the tree, from which it exudes in a vertical direction in columns or pieces upwards of a foot in length. This explanation (generally received) is very doubtful. The masses of gum-resin commonly seen have more the appearance of a stalagmitic formation (so to speak), arising from exudations from the branches of the tree dropping in the sand below. It is certain that leaves of trees and insects have been observed enclosed in these masses. The subject, however, is at present involved in obscurity. It may also be obtained by tapping the tree, when, in the course of a few days, a large solid mass is formed. It is said to be the Gum Animi of commerce, and is occasionally used in this Colony for the same purposes as Gum-Copal. It may be obtained in great abundance in various parts of the Colony.
- 7.—GUM, called CARMAN, CARAMAN, or BUCK WAX, from the Mani Tree (*Amyris*, or *Icica*, Sp.?). Contributed by the CORRESPONDENCE COMMITTEE. It is said to be the inspissated juice of the Mani Tree, called also Maniballi or Candlewood, and is used by the Indians for preserving their nets and cordage, and for the same purposes as pitch.

- 8.—GUM HYAWA, or RESIN of CONIMA, from the “Hyawa” or Incense tree (*Icica heptaphylla*, Aubl.). Contributed by WILLIAM FRESSON, Georgetown. This gum is very fragrant and is supposed to be suitable for pastilles, &c.
- 9.—INDIA RUBBER. Collected by W. C. McCLINTOCK, for the CORRESPONDENCE COMMITTEE. A considerable number of trees yield this commodity; but, so far as relates to this Colony, they have not been botanically determined with an accuracy that would permit of their being here enumerated.
- 10.—“CARAWEERA.” A red paint used by the Caribisi Indians. Contributed by WILLIAM FRESSON, Georgetown.*
- 11.—HONEY. From *Mellipona*, Sp.? Contributed by WILLIAM FRESSON, Georgetown. Used as a domestic remedy in coughs, sore throat, &c. It is slightly acid to the taste.
- 12.—DITTO. Contributed by the CORRESPONDENCE COMMITTEE.
- 13.—GUINEA PEPPER, or GRAINS of PARADISE (*Anomum Melegueta*, Roxb.). Contributed by WILLIAM FRESSON, Georgetown. These seeds are much superior to those imported from Africa.
- 14.—BLACK PEPPER (*Piper nigrum*, Lin.). From Monte Video, Berbice River. Contributed by T. B. DUGGIN. One vine yielded the contributor in one season a crop of 10 lbs. weight.
- 15.—WOURALLI, URALI, or OURARI POISON. Contributed by the CORRESPONDENCE COMMITTEE. It has been ascertained by Sir R. SCHOMBURGK that the basis of this celebrated poison is obtained from the *Strychnos toxifera*, Schomb.
- 16.—SULPHATE OF BIBIRINE. Contributed by WILLIAM FRESSON, Georgetown. This now well-known medicine, used as an anti-periodic and febrifuge, is obtained from the bark and seeds of the Bibiru or Greenheart tree (*Nectandra Rodiei*,

* Humboldt remarks that red paint is the ordinary decoration of the Indian tribes; the most common kind is obtained from the seeds of *Bixa Orellana*, and is called *roucou*, or *arnotto*. Another, much more expensive, kind is extracted from the leaves of *Bignonia chica*; a black ingredient is obtained from *Genipa Americana*. Wallace states that the paint is very durable, for though they bathe two or three times a-day, it lasts a week or a fortnight before it quite disappears. Humboldt and Bonpland both tried it, and experienced this result to their great annoyance.

Schomb.). It was discovered by the late Dr. HUGH RODIE, about the year 1814.

- 17.—STARCH from the seeds of the Greenheart tree. Contributed by the CORRESPONDENCE COMMITTEE. The seeds of the Greenheart contain a considerable quantity of starch. Occasionally, in times of scarcity, these seeds are grated and mixed with decayed Wallaba, the wood of *Eperua falcata*, Aubl., and used by the Indians as food. The starch, from being imperfectly separated, has a bitter taste, and is said to possess a febrifuge and tonic action on the constitution.
- 18.—CASTOR OIL PLANT (*Ricinus communis*, Lin.), seeds of. This plant grows abundantly and spontaneously throughout the Colony, and produces the well-known medicinal oil.
- 19.—INDIAN, or BUCK SHOT. Contributed by the CORRESPONDENCE COMMITTEE. This is the seed of an undetermined species of *Canna*, variously supposed to be *C. coccinea*, *C. lutea*, *C. occidentalis*, and *C. Achiras*, and is used by the Indians as shot. From the rhizomes of the plant is obtained the Tousles-mois Starch of commerce. It grows wild in this Colony, and could be cultivated to any extent.
- 20.—TOBACCO SEEDS. (*Nicotiana Tabacum*, Lin.) Contributed by the CORRESPONDENCE COMMITTEE.
- 21.—BARACARA TREE SEEDS. (*Erythrina Corallodendron*, Lin.) Contributed by WILLIAM FRESSON, Georgetown.
- 22.—MORA BARK, Powdered. (*Mora excelsa*, Benth.) Contributed by Dr. GORING, Arouabisce Coast. It is used successfully in cases of dysentery.
- 23.—CAYENNE PEPPER. Contributed by WILLIAM FRESSON, Georgetown.
- 24.—CAYENNE PEPPER, Soluble. Contributed by WILLIAM FRESSON, Georgetown. This very elegant and useful condiment was prepared by the contributor.
- 25.—CAYENNE PEPPER, Active principle of, dissolved in olive oil. Contributed by WILLIAM FRESSON, Georgetown.
- 26.—COFFEE, Leaves of, dried. Contributed by the CORRESPONDENCE COMMITTEE. It is said to contain the active principle of coffee. A sample sent to the Local Exhibition in Georgetown,

by Mr. T. A. GREEN, of Albert Town, was accompanied by the following statement:—"The best method of preparing the leaves is by baking, as they are not then so friable as when roasted. In this state they are fit for exportation, and may be kept without deterioration for a considerable length of time. I have kept them for six months exposed in the air, and at the end of that time they still retained their aromatic flavour when drawn. I have used nothing else as a morning and evening beverage for some time, and consider the qualities of the leaves to be equal to those of the berries."

27.—COFFEE, Leaves of, Dried. Contributed by Miss REISS, Plantation *Klein Pouderoyen*.

28.—DITTO, DITTO. Contributed by JOHN HENRY.

29.—DITTO, DITTO. Contributed by Mrs. E. J. JOHNSON, Mahaiconi.

30.—MEGASS SLAG, Pulverised. Contributed by EDMUND FIELD, Plantation *Great Diamond*. This slag is found in the flues under the copper-walls of estates. It is a product of the combustion of Megass.* It is rich in potash salts, and is believed to be a valuable manure.

* "Megass" is the sugar-cane after being squeezed by passing through the rollers of the mill: it is, when sufficiently dried, used as fuel for boiling the cane-juice. Dr. Dalton (the author of the 'History of British Guiana') has recently called attention to the antiseptic and disinfectant properties of "Green" Megass. From the experiments instituted, and from the results of the observations of himself and of other medical practitioners, he deduces the subjoined conclusions:—

1. That animal matter in a state of decomposition, when subjected to the action of green megass, has the nature of that decomposition changed.
2. That the foetid and disagreeable effluvia resulting from the decomposition of animal bodies, is arrested and obliterated by the action of fresh megass.
3. That the foul air and unpleasant smell not unfrequently occurring in the wards of hospitals, is soon removed, and the atmosphere rendered sweet, by the influence of fresh megass.
4. That ulcers having a tendency to slough, and actually in a sloughing state, are improved, and in many cases cured, by the influence of fresh megass.
5. That green or fresh megass possesses in a high degree powerful antiseptic, disinfecting, and sanative properties.
6. That the nature or cause of these properties is at present unknown, but probably depends on saccharine fermentation or exhalation.

The subject is one eminently worthy of further investigation wherever the agent or any cognate substance is procurable.

- 31.—DITTO, DITTO, in Mass. Contributed by EDMUND FIELD, Plantation *Great Diamond*.
- 32.—OIL, from Liver of the Sword or Comb Fish (*Pristis pectinatus*, Latham). Contributed by WALLACE MERRIMAN, Berbice. This oil is used by immigrants from India for anointing the skin. It is also used in lamps. The contributor says that a liver will yield from 15 to 20 gallons of oil.
- 33.—GLUE, from the "GILBACKER," or "GILBAGRE" (*Silurus Parkerii*). Contributed by WALLACE MERRIMAN, Berbice. The fish which yields this valuable glue is very abundant in the estuaries of the rivers of this Colony. A considerable quantity of the glue is now exported. It is said to be used in the manufacture of isinglass.
- 34.—DITTO, DITTO. Contributed by T. M. SARGEANT, Georgetown.
- 35.—"GUTTA LUCUMA," or GUM from the BARTABALLI TREE (*Lucuma Bonplandii*, H. B.). Contributed by DAVID A. MELVILLE, Berbice. The following remarks are given by the contributor:—"This gum is obtained from the "Bartaballi tree," which, like the Bully tree, yields a milky "juice on being tapped. The Bartaballi also ranks as one of "the wholesome milk-producing trees; the fruit is edible, and "of a most agreeable taste. The gum differs from Balata in "becoming of a sticky and highly-elastic nature when slightly "heated; when cold, it is dry and brittle."
- Like Balata it is insoluble in water, hot or cold, but becomes plastic at a much lower temperature, when it acquires an elasticity that enables it to be drawn out into the minutest filaments. But its stickiness seems likely to operate against its usefulness as a gum of the Gutta Percha tribe. The tree is abundant in the Canje Creek, but is seldom found of large dimensions.
- 36.—LOCUST BARK (*Hymenoclea Courbaril*, Lin.). Contributed by the CORRESPONDENCE COMMITTEE. It is used by the Indians in cases of dysentery.
- 37.—MORABALLI BARK. Contributed by WILLIAM FRESSON, Georgetown. It is used by the Indians as a fish poison, and also as a dressing for sores.
- 38.—WALLABA BARK (*Eperua falcata*, Aubl.). Contributed by

WILLIAM FRESSON, Georgetown. It is used by the Indians in toothache; the cavity in the tooth being stuffed with the inner bark.

- 39.—CURUBALLI BARK. Contributed by WILLIAM FRESSON, Georgetown. A decoction of the bark is used by the Indians as an emetic.
- 40.—SERADA, or CEREDA BARK. Contributed by WILLIAM FRESSON, Georgetown. A decoction of the bark is used by the Indians as a bath in small pox.
- 41.—WILD GUAVA BARK (*Pisidium, Sp. ?*). Contributed by WILLIAM FRESSON, Georgetown. It is used by the Indians in cases of dysentery.
- 42.—MORA BARK (*Mora excelsa, Benth.*). Contributed by WILLIAM FRESSON, Georgetown. Used in cases of dysentery.
- 43.—CASHEW BARK (*Anacardium Occidentale, Lin.*). Contributed by WILLIAM FRESSON, Georgetown. It is used as an astringent.
- 44.—BULLY TREE BARK (*Sapota Mulleri ?* or *Mimusops Balata, Gaert., Achras Balata, Aubl. ?*). Contributed by WILLIAM FRESSON, Georgetown. A decoction of the bark is used as an emetic.
- 45.—BITTER WOOD, or CURUBURANDA. Contributed by DAVID A. MELVILLE, Berbice. It is used as a stomachic
- 46.—SIMARUBA ROOT (*Simaruba officinalis, De Cand.*). Contributed by the CORRESPONDENCE COMMITTEE. A decoction of the bark is used in dysentery.
- 47.—SARSAPARILLA ROOTS (*Smilax officinalis, H. B. K.*). Collected by W. C. McCLINTOCK for the CORRESPONDENCE COMMITTEE. The decoction is used as an alterative.
- 48.—BUSH ROPE (popularly called "Pain" rope). Contributed by the CORRESPONDENCE COMMITTEE. It is used in rheumatism in the form of decoction.
- 49.—RED MANGROVE BARK (*Rhizophora racemosa, Meyer*). Contributed by WILLIAM FRESSON, Georgetown. The decoction of the bark has been found of great service in cases of chylous urine.

- 50.—YELLOW SILVERBALLI BARK (*Nectandra*, or *Oreodaphne*, *Sp.?*). Contributed by WILLIAM FRESSON, Georgetown. It is used in tanning.
- 51.—BROWN SILVERBALLI BARK (*Nectandra*, or *Oreodaphne*, *Sp.?*). Contributed by WILLIAM FRESSON, Georgetown. Used in tanning.
- 52.—COMACOBALLI BARK. Contributed by WILLIAM FRESSON, Georgetown. Used in tanning.
- 53.—SIMARUBA BARK (*Simaruba officinalis*, *De Cand.*). Contributed by WILLIAM FRESSON, Georgetown. Used in tanning.
- 54.—MESS APPLE BARK (*Blakea quinquenervia*, *Aubl.*). Contributed by WILLIAM FRESSON, Georgetown. Used in tanning.
- 55.—BLOOD WOOD BARK. Contributed by the CORRESPONDENCE COMMITTEE. Used in tanning.

SECTION D.

WOODS FOR BUILDING AND OTHER PURPOSES.

From the Massaruni River. Collected by Thomas Fauset, for the Committee of Correspondence. Nos. 1 to 20.

- 1.—SURADANI. A hard wood much used for corials or canoes; also for timbers, rails, the naves and felloes of wheels, and for planks and covering boards of Colony craft. It will square from 14 to 20 inches, and from 30 to 40 feet long. Its rich brown colour would adapt it well for furniture. The tree is plentiful, and of large size.
- 2.—BORAHOVA. A tree of considerable size, but the timber is little known and seldom used.
- 3.—HOUBABALLI. A light brownish wood, beautifully variegated with black and brown streaks; easily worked, takes a fine polish, and makes beautiful furniture and cabinet work of every description. It may be had from 15 to 20 inches square, and from 40 to 70 feet long. The tree grows to the height of about 100 feet, and is by no means scarce in some localities.
- 4.—SERADA, or CEREDA. A hard light-coloured wood. Squares from 12 to 16 inches.
- 5.—CABACALLI. This tree grows tall and straight, and will square from 12 to 18 inches for 40 or 50 feet in length. The wood is heavy and close-grained, and is considered very little inferior to Silverballi for boat-building, as, like that wood, it possesses a bitter principle which protects it against the attacks of worms, and renders it durable under water. It must, however, be fastened with copper nails. Of the branches, timbers and knees for every description of craft are made, which are quite as lasting as those of Mora, No. 20.
- 6.—CRETTI, KRETTY, or BASTARD SILVERBALLI. A light and durable wood. It is sometimes used for planking vessels, but chiefly for inside boarding. It is common, and may be obtained from 12 to 20 inches square.

- 7.—SIMARUBA (*Simaruba officinalis*, Dec., *Simaruba amara*, Aubl.). This tree grows on hill sides to the height of 80 feet, branching and somewhat crooked; its wood resembles white pine in colour and quality. It is light and easily worked, and may be had in boards 20 to 40 feet long and from 24 to 30 inches wide. It is much used for partitions and other inside work of houses, but will not bear exposure to the weather.
- 8.—DUCA, or DOOKA. A hard wood of large size, squaring from 12 to 18 inches. The tree yields a large quantity of gum.
- 9.—ARUMATA, or ARMATA. This wood is seldom found more than 25 to 35 feet in length, and 7 inches in diameter. It is a hard strong wood, excellent for planking vessels, but is chiefly used for the rafters of cottages. The heart is pretty, and is occasionally used for cabinet work.
- 10.—WADADURI, or MONKEY POT (*Lecythis grandiflora*, Aubl.). This tree is plentiful throughout the Colony. It grows tall, straight, and to a large size. The wood is hard, close-grained, and handsome. It is used for furniture, and makes good staves for hogsheads. Height of the tree, 106 feet; diameter of the trunk, 30 inches.
- 11.—KURAKAI, or CURAKI. This tree grows to an enormous size, and yields a resin similar in properties to that of Hyawa, Section C, No. 8. The wood is described as the most suitable in the Colony for deals, to be proof against dry rot, and, when not exposed to the weather, exceedingly durable. It is light, open-grained, and highly odorous, and is much used for corials and canoes. It is plentiful in all parts of the Colony, in low swampy places.
- 12.—MANIBALLI, or CANDLE-WOOD (*Apocynaceae?*). This tree grows very straight; the timber can be had from 30 to 40 feet long, and from 8 to 10 inches in diameter. It is hard, close, and even-grained, and is excellent for the frames of houses. It is from a variety of this tree that the Indians procure the wax (Karman or Cari-mani) which they use in fastening their arrow-heads, hooks, &c. See Section C, No. 7.
- 13.—DACANABALLI. A hard wood of large size, squaring 20 inches and upwards.

- 14.—SIPIRI, BIBIRU, or GREENHEART yellow variety (*Nectandra Rodaei*, Schomb.). This tree is very abundant within 100 miles of the coast region, and its timber, squaring from 18 to 24 inches, may be had without a knot from 60 to 70 feet long. It is a fine even-grained hard wood, well adapted for planking of vessels, house-frames, wharves, bridges, and other purposes, where great strength and durability are required. As it is unsurpassed in resistance to tensile and compressive strains, it is admirable for kelsons and for ship timbers. Its excellence is now acknowledged at Lloyd's, where, along with Mora (No. 20) it ranks as one of the *eight* first-class woods for ship building. From the bark and seeds the well-known "Bibirine" is obtained. See Section C, No. 16.
- 15.—HURUWASSA, or SOAP-WOOD (*Sapindus Saponaria*, Lin.). Both the root and bark as well as the seeds are used by the Indians as a substitute for soap. The wood is hard and tough, and may be obtained 20 inches square and upwards.
- 16.—WAMARA, or BROWN EBONY. A hard, cross-grained wood, not apt to split, and therefore well adapted for ship-building. It is also one of the handsomest woods of the Colony, and would make beautiful furniture. Sir R. Schombourgh describes it as a scarce tree, attaining a great height. The only part used is the heart, which is dark-brown and often streaked. Its hardness and weight cause it to be preferred by the Indians for their war-clubs. It may be had from 6 to 12 inches square, and from 20 to 40 feet long.
- 17.—SIRUABALLI, or SILVERBALLI, yellow variety (*Nectandra* or *Oreodaphne*, Sp.?). This tree grows to a considerable size, but is then often hollow. It will, however, square sound from 10 to 14 inches, and often from 40 to 50 feet long. The wood is lighter than water, and contains a bitter principle, which resists the attacks of worms. Hence it is much used in the Colony for the outside planking of vessels and boats. It is also used for masts and booms. There are four varieties or species of this tree, distinguished as black, brown, yellow, and white Silverballi, possessing the same properties, but of these the white is least esteemed.
- 18.—HOROWARY, or HURUWARY. A hard wood, squaring from 12 to 16 inches.

19.—SIMIRI, or LOCUST TREE (*Hymenæa Courbaril*, Lin.). This tree, which is abundant in the Colony, often attains the height of 60 or 80 feet before it throws out a branch, and has a diameter of 8 to 9 feet. The wood is close-grained, hard, and compact, of a fine brown, streaked with veins, and takes a beautiful polish, which recommends it for furniture. As it does not split or warp, it is well adapted for mill-timbers and engine-beds. A good deal of it is sent to England to be used as trenails in planking vessels, and in beams and planks for fitting up steam engines. It has also been found to answer well for the frames, wheels, &c., of spinning machines. The Indians and Negroes are fond of the farinaceous saccharine pulp enveloping the seeds. The Indians make "wood-skins" or canoes, of the bark. The tree yields what is supposed to be the Gum Animi of commerce. See Section C, No. 6.

20.—MORA (*Mora excelsa*, Benth). This, the most majestic tree of the forests of Guiana, towers above every other, often attaining a height of from 120 to 150 feet, and is frequently seen rising to the height of 60 feet without a branch. When of that length it will square 18 or 20 inches, but is seldom then sound throughout. The wood is extremely tough, close, and cross-grained, so that it is difficult to split, which renders it peculiarly adapted for shipbuilding. The trunk makes admirable keels, timbers, and beams; and the branches, having a natural crookedness of growth, are unsurpassed as knees. Were men-of-war ceiled with this wood, little mischief would be occasioned by splinters during action. In most respects it is superior to oak, particularly in its exemption from dry rot. This, as well as Greenheart (No. 14), ranks as one of the *eight* first-class woods at LLOYD'S for shipbuilding. It is abundant along the rivers of the coast region, and extends as far south as lat. 3° N. It grows luxuriantly on sand reefs, and on tracts of barren clay known as "Mora clay," a soil so sterile as not to admit of profitable culture. Sir R. Schomburgk, referring to this tree, states:—"In all my former travels in Guiana, I have nowhere seen trees of this description so gigantic as on the land adjoining the Barima at its upper course. Indeed, frequently when the boat rounded some point which the river made in its course, and a long reach was before, these majestic trees appeared in the background as hillocks clothed with

vegetation, until a nearer approach showed our mistake, and we found that what we considered to have been a hillock was a single tree, rising to the enormous height of 130 to 150 feet, forming by itself, as it were, a forest of vegetation. The importance of the Mora in naval architecture is now fully recognized in Great Britain, and a new export trade has been opened to the Colony. On the upper Barima this tree is so abundant, and grows to such a size, that the whole British navy might be reconstructed merely from the trees which line its banks, a circumstance well worth consideration, for the river being navigable to vessels of 12 feet draught, the craft intended for the transport of the timber might load at the very spot where the trees are cut down." The bark of the Mora is used for tanning; and in times of scarcity the seeds grated and mixed with decayed Wallaba wood, are eaten by the Indians. The seeds also are said to be beneficial in cases of diarrhoea or dysentery. See Section C, Nos. 22 and 42.

- 21.—MAHOGANY (*Hæmatoxylon Campechianum*). From Plantation Bath, Berbice. Contributed by H. T. GARNETT.
- 22.—HOUBABALLI. See No. 3. Contributed by ANDREW HUNTER.
- 23.—HOUBABALLI, Black. Contributed by COMMITTEE OF CORRESPONDENCE. A dark-coloured variety of No. 3, for furniture and cabinet work.
- 24.—SIRUABALLI, or SILVERBALLI, Brown variety. (*Ocotea*, Sp.?) A hard wood, similar in quality to the yellow variety. Height of the tree, 90 feet; diameter of the trunk, 18 inches. It is not very plentiful. Contributed by ANDREW HUNTER.
25. DUCALIBALLI. This tree is of large size, but not plentiful. The timber may be had 40 feet long, but seldom more than 20 inches in diameter. It is a deep red, close-grained wood, more even and compact than Mahogany, and takes a high polish; it is in great repute for cabinet and turning work. It resembles, or perhaps is identical with, the Brazilian Beef-wood. Contributed by ditto.
- 26.—CARABA, or CRAB-WOOD (*Carapa guianensis*, Aubl.). This tree is plentiful, grows tall and straight, and may be cut from 40 to 60 feet in length, with a square of 14 or 16 inches. The wood is light, and, as it takes a high polish, makes excellent

furniture. It is also much used for floors, partitions, and doors in dwelling-houses. Masts and spars are formed of it, and it is sometimes employed for sugar hogsheads, and even shingles, as it splits freely and smoothly. There are two varieties, red and white. The seeds yield "Crab Oil," and the bark is useful for tanning, so that this tree ranks among the most useful in the Colony. Contributed by ditto. See Section C, Nos. 1 and 2.

27.—HYAWABALLI (*Omphalobium Lamberti*, Dec.). This tree is not plentiful. Its timber, known as Zebra-wood, is in great request for furniture, on account of its beauty, and is easily worked. The tree is of large size, but the heart seldom squares more than 10 or 12 inches. Contributed by ditto.

28.—BUSH-ROPE. From the Demerara River. Contributed by E. FIELD.

29.—LAUREL OIL TREE (*Oreodaphne Opifera*, Nees?). From the lower part of the Orinoco River, where the tree is abundant. It yields the celebrated Laurel Oil (see Section C, 3), which is obtained by tapping the tree to its centre. The wood is hard, and when recently cut highly odoriferous. Contributed by W. C. MCCLINTOCK, who states that he commissioned an Indian to ascend the River Orinoco as far as the village of Zacapana, about 400 miles from Mr. McClintock's post on the Pomeroon, to procure this specimen. The Indian unfortunately did not obtain either flowers or seeds. The seeds are used medicinally, and with surprising effect in cases of obstinate fevers. The oil, it is added by Mr. McClintock, is a certain cure for liver complaint.

30.—MARIWAYANA, or PURPLEHEART (*Copaifera pubiflora* and *bracteata*, Benth.), called by the Arawaks "Courabiril." Rather a scarce tree in the coast regions, being found chiefly in the mountainous tracts above the cataracts. There are several varieties or species, but all much alike, possessing great strength and elasticity, and used for furniture, on account both of their colour and durability. Used also for mortar-beds, being superior to any other wood in sustaining the shocks produced by the discharge of artillery. Sir R. SCHOMBURGK was assured by Colonel MOODY, R.E., that the Black Greenheart and the Purpleheart were the only woods that stood the test

as mortar-beds at the siege of Fort Bourbon, in the Island of Martinique. One variety (*C. bracteata*) is very common in the savannas near the Rivers Rupununi, Takutu, and Branco, but this is of small size compared with the others. It is used for windmill-shafts, rollers, and machinery. If better known, it would be likely to take the place of Rosewood in the ornamental work of the cabinet-maker. It is of the bark of this tree, when freshly cut down, that the Indians chiefly make their "woodskins," or canoes, some of which are large enough to carry 20 or 25 persons in smooth water.

31.—BURUEH, BULLY, or BULLET TREE (*Sapota Mulleri*, *Miq.?*). This tree is found throughout the Colony, but most abundantly in Berbice. It is of the largest size, often 6 feet in diameter, and having the trunk destitute of branches nearly to the top. The leaves, branches, and trunk, produce a whitish milk, forming the gum now known as "Balata" (Section C, Nos. 4, 4a, 5), the properties of which appear to be intermediate between Caoutchouc and Gutta-percha. The fruit is of the size of a coffee berry, very delicious, and resembling the Sapidilla. The wood is dark brown, variegated with small white specks, and is extremely solid, heavy, close-grained, and durable. It is chiefly used in house-framing, for posts, beams, and floors; and, as the weather has but little influence on it, is esteemed the most valuable timber for the arms, shafts, and framework of windmills. It squares from 20 to 30 inches, and may be obtained from 30 to 60 feet long. In salt or brackish water it is sure to be attacked by the worms. A tree cut down by SCHOMBURGK, near the Cuyuni, measured 67 feet to the first branches, and thence to the top 49 feet—in all, 116 feet. The upper portions of the trunk and branches are manufactured into wheel-spokes, palings, &c. A decoction of the bark is used, in the form of clyster, and is said to be very efficacious in a disease known to persons residing in the interior by the name of "Quata" ("Kaina-Kuhu," Arawaak name), which is very prevalent among the Indian tribes at certain seasons of the year, and more especially at the commencement of the dry season in September.

32.—ETOOIE, or ITURI WALLABA. Has similar properties to Wallaba, but is of smaller size and finer grain.

- 33.—TATABOO, or TATABA. The tree is of large size, growing to the height of about 60 feet. The wood is hard and tough, and well adapted for mill-timbers and planks, also for ship-building, gun-carriages, coffee-stampers, &c.
- 34.—CURUBERANDA, or BITTER-WOOD. Very hard, and said to be valuable for ship or boat building. The wood is light-coloured, and has a bitter taste. It is plentiful in the Essequibo and Massaruni Rivers. It squares from 14 to 20 inches. (See Section C, No. 45.)
- 35.—WALLABA (*Eperua falcata*, Aubl.). This wood is of a deep red colour, and is hard and heavy, but splits freely and smoothly, and is much used for shingles, staves, palings, posts, house-frames, &c. It is impregnated with a resinous oil, which makes it very durable both in and out of water. A roof well shingled with this wood will last more than 40 years. The tree is very abundant throughout the Colony, growing generally on the banks of rivers. It may be cut 30 or 40 feet long, and 15 to 20 inches square. The tree yields an oil and a gum resin, having medicinal properties. See Section C, No. 38.
- 36.—CUAMARA, or TONKA (*Dipteryx odorata*, Willd.). This tree is not very plentiful in the Colony. The timber may be had from 40 to 50 feet long, and 18 to 20 inches square. It is hard, tough, and durable in an eminent degree, and it is said that a piece one inch square, and of a given length, will bear 100 lbs. more weight than any other timber in Guiana of the same dimensions. It is, therefore, peculiarly adapted for any purpose where resistance to great pressure is desired. It is used for shafts, mill-wheels, and cogs. This tree yields the well-known Tonka Bean. The bark and the leaves contain an aromatic oil.
- 37.—TURANIRA, TOURANERO, or BASTARD BULLY TREE (*Humirium floribundum*, Mart.). This tree is very abundant, and grows to a large size. It will square 25 inches from 40 to 50 feet in length. It is a hard, even-grained wood of a cedar brown colour, and is used for framing timber, spokes, &c., and is generally applicable to the same purposes as Bully Tree, which it much resembles, except that it is not durable when exposed to the weather. The fruit is delicious.

38.—HACKIA. This wood is also known in the Colony as “*Lignum Vitæ*.” The tree producing it attains a height of from 30 to 60 feet, squaring 16 to 18 inches. It is a valuable hard wood, used for mill cogs and shafts, and occasionally for furniture.

NOTE.—For the loan of the specimens numbered from 30 to 38 both inclusive, the Committee are indebted to the courtesy of Dr. HOOKER, of the Royal Gardens, Kew, who, under the sanction of the Right Honourable the First Commissioner of Works, &c., placed them at their disposal for the Paris Exhibition ; having been formerly presented by the Committee to the Museum at Kew.

SECTION E.

INDIAN MANUFACTURES AND MISCELLANEOUS
ARTICLES.

- 1.—BLOW-PIPE, covered with Pegall work, from the Pomeroon River. Collected by W. C. McCLINTOCK (65). The blowpipe of the Indians consists of an inner and outer tube, the latter being sometimes covered with ornamental "pegall-work." The inner tube is a single internode of the *Arundinaria Schomburgkii*, Benth. These internodes are sometimes 16 feet in length. The arrow (see No. 3) is inserted into the tube, having a dossil of cotton around the butt-end; aim is then taken, and the arrow projected by a sudden expiration.
- 2.—DITTO, from the Essequibo River. Contributed by W. FRESSON.
- 3.—QUIVER, of Pegall work, containing arrows dipped in the celebrated Wourali poison, a scratch from which, it is stated, would produce almost instantaneous death. These arrows are discharged by the blow-pipe. The quiver is generally accompanied by the *maxilla* of a fish, which is used for partially cutting the poisoned part of the arrow, so that that portion may break off and remain in the wound. The cutting is effected by rapidly turning the arrow between the teeth of the *maxilla*. Made by the Indians of the Pomeroon River. Collected by W. C. McCLINTOCK. (64)
- 4.—DITTO. Contributed by COMMITTEE OF CORRESPONDENCE.
- 5.—"PAGALA," or "PEGALL," large size, made from the Iturite reed (*Maranta obliqua*, Rudge), by the Arawak Indians of the Pomeroon River. Collected by W. C. McCLINTOCK. (1)
- 6.—DITTO. Collected by ditto.
- 7.—DITTO. Collected by ditto. Made by Carabisi Indians.
- 8.—"PAGALA," Nest of, consisting of twelve. Made by Arawak Indians. Collected by ditto. (15)

- 9.—HAMMOCK, large size. Made by the Warrau Indians of the Pomeroon River, from the fibre of the Ita Palm (*Mauritia flexuosa*, *Lin.*). Collected by ditto. (2)
- 10.—DITTO. Collected by ditto. (63)
- 11.—DITTO. Collected by ditto. (13)
- 12.—DITTO. Collected by ditto. (14)
- 13.—DITTO. Collected by ditto.
- 14.—DITTO. Made of the native Cotton. By Accawai Indians of the Pomeroon River. Collected by ditto. (60) The native cotton is remarkable for its fine long staple and silky appearance. Large hammocks of this material command a far higher price in the Colony than those of English manufacture.
- 15.—DITTO. Collected by ditto. (61)
- 16.—DITTO. Collected by ditto. (62)
- 17.—DITTO. Collected by ditto.
- 18.—DITTO, of small size. Made of the fibre of the Ita Palm. Used by Accawai women to carry their infants. Collected by ditto. (62)
- 19.—DITTO. Made by Warrau Indians. Collected by ditto. (45)
- 20.—DITTO. Made of native cotton. By Accawai Indians. Collected by ditto. (3)
- 21.—DITTO. Collected by ditto.
- 22.—DITTO. Collected by ditto.
- 23.—CASTING NET, of silk grass, or fibre of *Bromelia Karatas*, *Lin.* Made by Spanish Arawak Indians. Collected by ditto. (53)
- 24.—WORK BASKET, of Pegall work. Made by Indians of the Pomeroon River. Collected by ditto: (28)
- 25.—DITTO. Collected by ditto. (29)
- 26.—DITTO. Collected by ditto. (30)
- 27.—DITTO. Collected by ditto. (31)
- 28.—CIGAR CASES, of Pegall work. Made by Accawai Indians. Collected by ditto. (27)

- 29.—“CUYUS,” or “QUEYUS,” Indian bead ornaments. The only covering of Arawak women. Collected by ditto. (7)

NOTE.—Queyus. In Rawlinson's ‘Herodotus,’ vol. iii., p. 137, note 9, it is stated that the unmarried girls of Ethiopia now only wear an apron of thongs, not unlike that on the nose of a charger. It is called rahát, and is sometimes ornamented with cowries. The representation given shows that it strikingly resembles the “queyus of the Indian women.

- 30.—“CO-MI-U,” or STRAINER, of Pegall work. Made by Arawak Indians, and used by them to strain their drinks, such as Piwarri, Cassiri, Warapo, or the fermented juice of the sugar cane, which is most intoxicating. Collected by ditto. (32)

- 31.—MATAPI, or CASSAVA SQUEEZER, of Pegall work. Made by Arawak Indians. Collected by ditto. (60) This instrument is used by the Indians for expressing the juice from the Cassava root, after it has been grated on the Simarri.* It is first compressed and shortened as much as possible to increase its diameter; and is then filled with the grated root, and suspended from one of the tie-beams of the benab, or hut. It is then stretched by a lever passed through the lower loop, to the long end of which a weight is attached. By this means the capacity of the Matapi is diminished by nearly one-third; the juice is thus expressed, and is caught in vessels placed to receive it.

- 32.—“WARRI WARRI,” or INDIAN FANS. Made of the leaves of the Acayuru Palm (*Astrocaryum Aculeatum*, Meer.). By Arawak Indians. Collected by ditto. (50, 51, 52)

- 33.—“MATULI,” or SIEVE. Made by Accawai Indians; used to sift Cassava meal, and hold Cassava bread. Collected by ditto. (66)

- 34.—DITTO. Collected by ditto. (67)

- 35.—LETTER CASES, of Pegall work (sixteen). Made by Arawak and Accawai Indians. Collected by ditto. (17 to 26)

* A threshing instrument was discovered in a vault at Tyre, consisting of a large flat block of wood, 3 ft. by 4 ft.; the underside pierced with holes, in which were inserted a number of flints projecting about an inch beyond the surface. This is the threshing instrument mentioned by the prophet Isaiah xli. 15.—WILDE'S *Voyage to Madeira and the East*. It seems from the description to bear some resemblance to the “simarri,” or cassava grater of the Indians.

- 36.—WORK BASKET, of Pegall work, with letter-wood feet. Made by Arawak Indians. Collected by ditto. (67)
- 37.—DITTO. Made by Carabisi Indians. Collected by ditto. (75)
- 38.—DITTO. Collected by ditto.
- 39.—SHIRT. Made of the bark of the Comacoballi tree (Brown variety). Collected by ditto. (9)
- 40.—TROWERS, made of the bark of the Comacoballi tree (White variety). Collected by ditto. (8)
- 41.—HAMMOCK ROPES. Made of silk grass, or fibre of *Bromelia Karatas*, Lin. Collected by ditto. (6)
- 42.—DITTO. Collected by ditto.
- 43.—DITTO. Collected by ditto.
- 44.—AWIARRI, FLUTES, or WHISTLES (six). Made of Deer bones by Caribisi Indians. Collected by ditto. (64)
- 45.—“MACQUARI” WHIP. Made of Nibbi, a bush rope. By Indians of the Pomeroon River. Collected by ditto. (12)
These whips are used by the Indians at their macquaris, or funeral dances. This dance is a kind of single combat to test the power of enduring pain. One of the combatants standing firmly on one leg, puts forward the other, which his adversary lashes with all his might, stooping and springing at each blow to add force to it, until the other can endure it no longer. The combatants then change positions, and the whipper in his turn offers his leg to the lash.
- 46.—NECKLACE, of the seeds of the Se-weu berry, made by the Caribisi Indians. Collected by ditto. (65)
- 47.—WAR CLUB, used by Caribisi Indians. Collected by ditto. (53)
- 48.—DITTO. Collected by ditto.
- 49.—DITTO. Collected by ditto.
- 50.—DITTO. Collected by ditto.
- 51.—DITTO. Collected by ditto.
- 52.—DITTO. Collected by ditto.
- 53.—DITTO. Collected by ditto.

- 54.—DITTO. Used by Accawai Indians. Collected by ditto. (58)
- 55.—DITTO. Collected by ditto.
- 56.—BOWS, INDIAN (eighteen). Made of Letter-wood and Washiba Wood, by Indians of the Pomeroon River. Collected by ditto. (63)
- 57.—ARROWS, INDIAN. From the Pomeroon River. Collected by ditto. These are of various kinds distinguished among the Indians by different names. Those not barbed are called "A-she-taku;" those which are barbed are variously named "Y-accas," "Siperari," "Sarapa," and "A-tum." Blunt arrows, used for stunning birds, are named "Maruwaio."
- 58.—CONTRIVANCE FOR PUNISHING CHILDREN used by the Indians. The frame is filled with stinging ants, and the hands of the offender are then secured within it. Collected by ditto. Schomburgk, however, enumerates this as one of the means employed to test the juvenile Indian's capacity for the endurance of pain on his arrival at the period of adolescence.
- 59.—WAR CLUB. From the Pomeroon River. Collected by ditto.
- 60.—"DIHAS," or BARK "LAPS," the only covering of Warrau women. Collected by ditto. (10, 11.)
- 62.—CROWN, or CAP OF FEATHERS worn by Indians. Collected by ditto. (69) Two Macaws' tail feathers are usually inserted at the back of each cap.
- 62.—DITTO. Collected by ditto. (70)
- 63.—DITTO. Collected by ditto.
- 64.—DITTO. Collected by ditto.
- 65.—"MASWAH," or INDIAN FISH-TRAP. From the Pomeroon River. Collected by ditto. Used by Accawai Indians.
- 66.—"CORIAL," or INDIAN CANOE, of small size. From the Pomeroon River. Collected by ditto. (74) E. 79. Canoes of this description are much used by the Indians; they are hollowed out of the trunk of a single tree, and are sometimes of great size. One of those employed by SCHOMBURGK, during an expedition into the interior, was 42 feet long and $5\frac{1}{2}$ feet wide.
- 67.—DITTO. Collected by ditto.

- 68.—“WOODSKIN,” or “BUCK-SHELL,” of small size, from ditto. Collected by W. C. McCLINTOCK. These canoes are used by the Indians in the narrow creeks, where they can easily be hauled across shallows, or over fallen trees; but when of larger size are used also in the great rivers, and even for descending or “shooting” the rapids, their buoyancy carrying them safely through the boiling urge. The seats are formed of light pieces of wood, resting against the sides of the craft. To open the one sent, it must be kept in water for a week or ten days.
- 69.—ARTIFICIAL FLOWERS, made of Balata. (See Preface, p. lxxi, and Section C, 4.) Contributed by D. A. MELVILLE, Berbice.
- 70.—“BUCK HOUSE,” or Model of the Huts of the Indians of British Guiana, containing, in miniature, most of the articles usually found in Indian huts, or “Benaboos.” Contributed by COMMITTEE OF CORRESPONDENCE.
- 71.—DITTO. Contributed by ditto.
- 72.—“HAHA,” or INDIAN SHIELD, made from the Ita palm. From the Pomeroon River. Collected by W. C. McCLINTOCK. These shields are used by the Warrau Indians at one of their games, “which is played,” says Sir R. SCHOMBURGK, “in parties “two against two, and the champions, painted and dressed in the “distinguishing mode of their tribes, show their athletic skill “by attempting to push each other from a space of ground by “means of the *haha*, which resembles a shield. It appeared to “us an innocent pastime, which gave agility to their limbs, and “displayed to the greatest advantage their muscular power and “fine proportions.”
- 73.—DITTO. Collected by ditto.
- 74.—NECKLACES, of TUSKS and TEETH of the WILD HOG, or PECCARY. Worn by Caribisi men. From the Pomeroon River. Collected by ditto. (42 to 49.)
- 75.—INDIAN HAT, made of Palm leaves. Collected by ditto.
- 76.—BEETLES WINGS (*Bubrestis gigas*). Used by the Indians for bracelets. Collected by ditto.
- 77.—“MACQUARI” WHIP. (See No. 45.) Collected by W. C. McCLINTOCK.

- 78.—“SHAAK SHAAK,” or RATTLES. Used by Indians at their dances. Collected by ditto.
- 79.—BOWS and ARROWS, Indian. (See Nos. 56, 57.) Collected by ditto.
- 80.—INDIAN CAP, made of Sloth skin. Collected by W. C. McCLINTOCK.
- 81.—TORCHES, made from the Moraballi tree. Used by Indians. Collected by ditto.
- 82.—DITTO, made from the Boohurada tree. Collected by ditto.

SECTION F.

NATURAL HISTORY.

- | | |
|--|---|
| 1.— <i>Falco Guianensis</i> . | Eagle of Guiana |
| 2.— <i>Sarcoraniphus papa</i> . | King Vulture. Contributed by
HUBERT C. WHITLOCK. |
| 3.— <i>Dasypus novemcinctus</i> . | Armadillo. |
| 4.— <i>Dasypus novemcinctus</i> . | Armadillo. |
| 5.—Snout of <i>Pristis pectinatus</i> . | Saw fish. |
| 6.—Jaw-bone of <i>Squalus carcharias</i> . | Shark. |

N.B.—The skin of the above is also sent. The fish was caught at the mouth of the River Wai-ini.

- 7 & 8.—Two cases, each containing six drawers of insects. Collected by HUBERT C. WHITLOCK, consisting of
- | | |
|--------------|-------------------------------|
| Coleoptera. | Beetles. |
| Hymenoptera. | Bees, wasps, ants, &c. |
| Lepidoptera. | Moths, butterflies, sphinxes. |
| Neuroptera. | Pond-flies, or dragon-flies. |
| Diptera. | Two-winged insects. |
| Hemiptera. | Cicades and bugs. |
| Aptera. | Centipedes, scorpions. |
| Orthoptera. | Locusts, &c. |

The greater part of these insects were collected up the Essequibo, Massaruni, and Cuyuni Rivers, beyond her Majesty's Penal Settlement. Some were caught in the neighbourhood of New Amsterdam, and up the Berbice River; and others at Plantation Skeldon, on the Corentyne River.*

* Mr. Bates mentions that he obtained 1,200 species of insects during his sojourn on the Amazon and its tributaries; a wonderful collection to be made by one person in a country without any variation of climate or of physical features, and no part of it elevated five hundred feet above the level of the sea.—Wallace.

- 9.—Six skins of *rupicola crocea*. Cock of the rock. Contributed by
P. A. J. GRANT.
- 10.—*Felis onça*. Jaguar.
- 11.—*Felis concolor*. Puma.
- 12.—Marabunta's nest.
- 13.—*Dasypus novemcinctus*. Armadillo.
- 14.—*Lutra Brasiliensis*. Otter.
- 15.—*Canis Azarae*. Wild dog.
- 17.—Collection of 31 bird-skins.
- 1.—*Phœnicocercus carmifex* (two)
 - 2.—*Cissopis major*
 - 3.—*Trogon sulphureus*
 - 4.—*Gallula flavirostris*
 - 5.—*Icterus xanthornus*
 - 6.—*Coccygus helviventris*
 - 7.—*Dumawlius Atricapillus*
 - 8.—*Iacamerops grandis*
 - 9.—*Tankiornus icterocephalus*
 - 10.—*Macrocerus nobilis* (two)
 - 11.—*Prionitis momota* (two)
 - 12.—*Trogon Viridis*
 - 13.—*Cloroenas rufina*
 - 14.—*Crypturno variegatus* (two)
 - 15.—*Namenius Brasiliensis*
 - 16.—*Psittacus xanthops*
 - 17.—*Cassicus haemorrhous*
 - 18.—*Pionus melanocephalus*
 - 19.—*Falco aurantius*
 - 20.—*Ampelis carunculata*
 - 21.—*Coronideus hyacinthinus*
 - 22.—*Dryocopus lineatus*
 - 23.—*Thamnophilus doliatus*
 - 24.—*Chamaepelia talpacoti*
 - 25.—*Conurus cajennensis*
 - 26.—*Elaenia spadicea*
 - 27.—*Monaca tranquilla*.
- 18.—Bird skins. Contributed by HENRY TINNÉ GARNETT.

- 19.—Boletus.
20.—Ditto.
21.—Chrysotrix sciureus Sakawinki.
22.—Alligator.
23.—Canis Azarae Wild dog.
24.—Felis pardalis Tiger cat.
25.—Sloth, skin of.
26.—Monkey, skin of.
27.—Ant-eater, skin of.

SECTION G.

MISCELLANEOUS.

- 1.—SPECIMENS of human and other bones, shells, and other objects found in a mound or tumulus at Waramuri, on the River Pomeroon.
- 2.—PRINT, transferred to sheet of Balata (see Preface, p. lxx., and Sec. C, No. 4). Contributed by D. A. MELVILLE, Berbice.
- 3.—TWO SLABS of asphalte, and two sheets of fire-resisting roofing-paper. Prepared and contributed by G. J. BLANK.
- 4.—BOOTS. Made of the skin of the Camoudi snake (*Boa, sp.*). Contributed by G. T. BLANK.
- 5.—MODEL of Cottages for Immigrant Labourers on Plantation *Great Diamond*, Demerara. Contributed by EDMUND FIELD.
- 6.—SAMPLES of Agricultural Implements used in the Cultivation of the Sugar Cane; also of Coopers' Tools used in the manufacture of Sugar hogsheads, viz. :—

- 1 Demerara Mud Shovel, middle size.
- 1 " " " ring inside socket.
- 1 " " " No. 0 inside ring.
- 1 " " " " 0 outside ring.
- 1 " Hoe, No. 2.
- 1 " " " 2 semper.
- 1 Wood Handled Matchet, 24 in. by 2 in.
- 1 Socket " 20 in. by 2 in.
- 1 Cast Steel Round Eye Buck Axe, No. 3.
- 1 Cooper's Adze, chequered and clawed.
- 1 Black Helved Hatchet, No. 2.
- 1 Bright Cane Bill, No. 2.

- 1 Cooper's Hoe ea., 12 in. by 18 in.
- 1 „ Drawing Knife. "
- 1 „ Driver.
- 1 „ Drawing Knife, 12 in.
- 1 „ Hoe, 9 in.
- 1 Cooper's Best Driver.
- 1 Cast Steel Capoose Cup and Ball, 2½ in.
- 1 Cooper's Best Adze, No. 2.

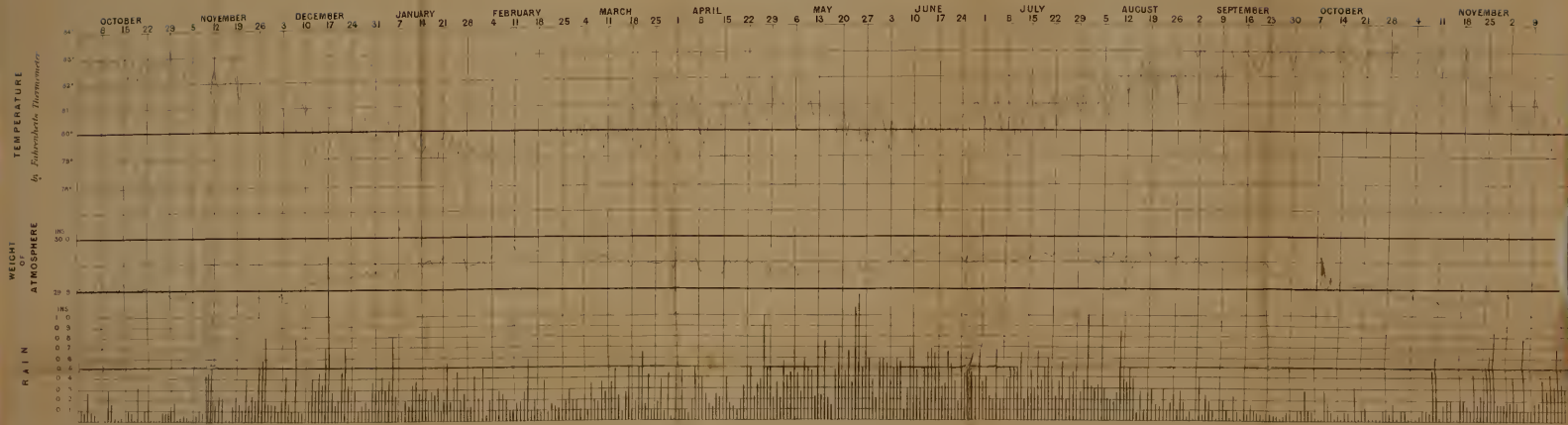
J. TROUNSELL GILBERT, *Chairman* ;
W. H. CAMPBELL,
DAVID SHIER,
WILLIAM WALKER,
E. A. WALLBRIDGE,
H. C. WHITLOCK,

Sub-Committee appointed to prepare
the Catalogue



DIAGRAM SHEWING COURSE OF **TEMPERATURE, WEIGHT OF ATMOSPHERE AND RAIN,**
PROJECTED FROM TABLES OF MEANS OF THE DAILY MEANS OF THESE ELEMENTS
OVER A PERIOD OF NINE YEARS COMMENCING
1ST NOVEMBER, 1845.

BY
PATRICK SANDEMAN.
OBSERVER.



GEORGETOWN OBSERVATORY BRITISH GUIANA
22ND MARCH 1855

R E M A R K S

*The Projections commence with the Month of October because that Month is uniformly a direct one of the Year.
The Months of October & November have been projected a second time for the purpose of showing the continuity of the Curve.
The Daily Means of Temperature are derived from ten observations viz. at the hours of 6, 8, 10, 12, 2, 4, 6, 8, 10, and 12 P.M.
The Rain is the amount for twenty-four hours.
The Tables from which the Diagram is made are constructed by taking the Mean of the Daily Means for each corresponding day of the nine years commencing 1st November 1845.*

London, Edward Stanford, 6, Charing Cross

INDEX TO THE CATALOGUE.

* * *The letters A. B. C. D. E. F. and G. before the Numbers, refer to the Sections in which they occur.*

- Acquero Palm, lxvi.
Agricultural Implements used in the Culture of Sugar, G. 6.
Alligator, F. 22.
Alluvial Deposit, xiv.
Ampelis Carunculata, F. 17 (No. 20).
Animals, F. 3, 4, 10, 11, 13, 14, 15, 21 to 24.
Animi Gum from Locust Tree, C. 6.
Ants, F. 7, 8.
Ant Eater, F. 27.
Aptera Guianensis, F. 7, 8.
Armadillo, F. 3, 4, 13.
Arrows, Indian, E. 57, 79.
Arrow-root Starch, A. 95 to 105.
Artesian Wells, xiv.
Articles of Food, xxxiv. See Section A.
— Indian Manufacture, lxxv. See Section E.
Artificial Flowers, Indian, E. 69.
Arumata, or Armata Tree, D. 9.
Asphalte Slabs, G. 3.
Awiarri Flutes, or Whistles, E. 44.

Balata, lxvi, lxviii, C. 4, 5.
— superior to Gutta-percha as Insulators, lxxi.
— for what purposes applicable, lxxi.
Bananas, xlviii, li, A. 169.
Baracara Tree Seeds, C. 21.
Barks (marked m. used medicinally; t. for tanning) :—
Blood Wood, C. 55, t.
Bully Tree, C. 44, m.
Cashew, C. 43, m.
Cereda, C. 40, m.
Comacoballi, C. 52, t.
Curuballi, C. 39, m.
Guava (Wild), C. 41, m.
Locust, C. 36, m.
Mangrove (Red), C. 49, m.
Mess Apple, C. 54, t.
Mora, C. 12, m.
Moraballi, C. 37, m.
Silverballi (Yellow), C. 50, t.
— (Brown), C. 51, t.
Simaruba, C. 46, m.
—, C. 53, t.
Wallaba, C. 38, m.

Bartaballi Tree, Gum of, C. 35.
Baskets, Work-, Indian, E. 24 to 27.
Beetles, F. 7, 8.
— Wings for Bracelets, E. 76.
Bibiru Tree (Greenheart), D. 14.
Bibirine, Sulphate of, C. 16.
Bitter Wood, C. 45, D. 34.
Blow-pipe for projecting Arrows, E. 1, 2.
Boletus, F. 19, 20.
Bones, Human and other, G. 1.
Borahova Tree, D. 2.
Boots, from Skin of Camoudi Snake, G. 4.
Bourne's Tables of the Gravity of the Woods of Guiana, xcv.
Bows, Indian, E. 56, 79.
Buck House (Indian Hut), E. 70, 71.
Bugs, F. 7, 8.
Bully Tree, lxvii, C. 4a, D. 31.
Bush Rope, C. 48, D. 28.
Butterflies, F. 7, 8.

Cabacalli Tree, D. 5.
Cacao, or Cocoa Seeds, A. 171.
Camphoraceous Fluid, from the Siruba Tree, lxvi.
Candlewood, D. 12.
Canis Azarae, F. 15, 23.
Caoutchouc, lxvi.
Cap, Indian, E. 80.
Caraman (Buck Wax) Gum, C. 7.
Caraweera (a Red Paint), C. 10.
Casareep, A. 170.
Cassava (Bitter), A. 164.
— (Sweet), A. 165.
— as Substitute for Potatoes, lv.
Cassicus Haemorrhous, F. 17 (No. 17).
Casting Net, Indian, E. 23.
Castor Oil Plant, C. 18.
Cayenne Pepper, C. 23 to 25.
Census of Guiana, xix., xx., xxi.
Census, Indian Population, lxxv.
Centipedes, F. 7, 8.
Chemical Articles and Products, lxiv.
See Section C.
Chocolate, A. 172.
Chamaepelia Talpacoti, F. 17 (No. 24).
Chrysotrix Sciureus, F. 21.

- Cicades Insects, F. 7, 8.
 Cigar Cases, Indian, E. 28.
 Cissopsis Major, F. 17 (No. 2).
 Climate, xvi., xvii.
 Cloroenas Rufina, F. 17 (No. 13).
 Coccygus helviventris, F. 17 (No. 6).
 Cock of the Rock's Skin, F. 9.
 Coffee, its Culture, xlv.
 — Beans, A. 181 to 186.
 — Leaves dried, C. 26 to 29.
 Coleoptera Guianensis, F. 7, 8.
 Co-mi-u (Indian Strainer), E. 30.
 Contrivance, Indian, for punishing Children, E. 58.
 Conurus Cajeneusis, F. 17 (No. 25).
 Coopers' Tools, G. 6.
 Corawa Fibre, B. 3.
 Corial (Indian Canoe), E. 66 to 68.
 Coronideus hyacinthinus, F. 17 (No. 21).
 Correspondence Committee, vii. See also List of Contributors, 51.
 Coruburanda, E. 45.
 Cotton, lvii.
 — Brumell on its Culture, lviii.
 — Creole, B. 8, 9, 11, 14.
 — Sea Island, B. 10.
 — Indian, B. 12, 13.
 Crab Oil, C. 1, 2.
 Creeks, xvi.
 Abari—Boerasiri—Canje.
 Mahaica—Mahaiconi Morueca.
 Pomeroun—Wai-ini.
 Cretti Tree, D. 25.
 Crowns of Feathers, Indian, 64.
 Curuballi Bark, C. 39.
 Curuberanda (Bitter-wood), D. 34.
 Cuyus, or Queyus, Indian Bead ornaments, E. 29.
 Dacanaballi Tree, D. 13.
 Dasypus novemcinctus, F. 3, 4, 13.
 Dali (Wild Nutmeg), or Vegetable Tal-low Tree, Candles and Soap made from it, lxvi.
 Dihas, or Barklaps, E. 60.
 Diptera, Guianensis, F. 7, 8.
 Dog, Wild, F. 15, 23.
 Dragon Flies, F. 7, 8.
 Dryocopus lineatus, F. 17 (No. 22).
 Duca, or Dooka Tree, D. 8.
 Ducaliballi Tree, D. 25.
 Dunawlius Atricapellus, F. 17 (No. 7).
 Eagle of Guiana, F. 1.
 Elaenea Spadicea, F. 17 (No. 26).
 Entomology, F. 7, 8.
 Etoorie Wallaba, D. 32.
 Exports (1747 to 1861), xciv.
 Falco Guianensis, F. 1.
 — Aurantius, F. 17 (No. 19).
 Fans, Indian, E. 32.
 Felis Onça, F. 10.
 — Concolor, F. 11.
 — Pardalis, F. 24.
 Fibrous Substances, lvii. See Section B.
 Fire-resisting Roofing-paper, G. 3.
 Flour, Cassava (Bitter), A. 131 to 142.
 — — (Sweet), A. 143 to 149.
 — — (Hog Tannia), A. 150.
 Flowers, Artificial, Indian, E. 69.
 Food, Articles of. See Section A., also xxxiv.
 Forests, xviii.
 GUIANA.
 Berbice, Demerara, Essequibo, xii.
 Capabilities of the Colony, lxxxviii.
 Census, xix., xx., xxi.
 Climate, xvi., xvii.
 Commercial Importance of Colonies, xxvi.
 Customs, xxxi.
 Earliest Dutch Settlement, xxi.
 — — — — —, xvii.
 — — — — — Tree Barks, lxv.
 — — — — — Numerous Varieties, many apparently unknown, xviii.
 Geographical Position and Character, xi.
 — Divisions, xi.
 Geological Impressions, Character, and Features, xii. to xiv.
 Georgetown, Capital, xxiv.
 Hope Town, xxii.
 Immigrants, xxi.
 Light Houses and Ships, xxiv.
 Medicinal Properties of Plants, lxiv.
 Mineral Wealth Undeveloped, xviii.
 Mountains, xiii.
 Natural Drainage, xvii.
 Navigation, Facilities inland, xi.
 New Amsterdam, xxv.
 Political Constitution, xxv.
 Postal System, xxvii.
 Productiveness of Soil, xv.
 Revenue Duties, &c., xxvi.
 — Expenditure and Receipts, xxx.
 Roman Dutch Law in Force, xxv.

GUIANA—*continued*.

- Savings Bank, xxviii.
 Staple Commodities, xxv.
 Suggestions for Ameliorating the Condition of the Colony, xxxii.
 Timber Trees, xviii.
 Vegetation, Luxuriance of, xvii.
 Zoology, xviii.
 Guiana Pepper, C. 13.
 Gallula Flavirostris, F. 17 (No. 4).
 Glue from Galbacker Fish, C. 33, 34.
 Greenheart Tree, C. 17, D. 14.
 Gums, Animi, C. 6.
 — Balata, C. 4, 4a, 5.
 — Carman, C. 7.
 — Gutta lucuma, C. 35.
 — Hyawa, C. 8.
 — India Rubber, C. 9.
 Hackia (Lignum Vitæ), D. 38.
 Haha, Indian Shield, E. 72, 73.
 Hammocks, Indian, E. 9 to 22.
 Hammock Ropes, E. 41 to 43.
 Hat, Indian, E. 75.
 Hemiptera Guianensis, F. 7, 8.
 Honey, C. 11, 12.
 Horowary or Huruwary Wood, D. 18.
 Horse Eye Bush-rope Fibre, B. 7.
 — Stem, B. 18.
 Houbaballi, D. 3, 22, 23.
 Huruwassa (Soap Wood), D. 15.
 Hyawa (Incense Tree), C. 8.
 Hyawaballi (Zebra Wood), D. 27.
 Hymenoptera Guianensis, F. 78.
 Icterus Xanthormus, F. 17 (No. 5).
 Indian Manufactures and Miscellanies.
 See Section E.
 — Buckshot, C. 19.
 — Canibalism, lxxxii.
 — Implements and Weapons, lxxx.
 — Native Tribes, Names of, lxxvi.
 — Ditto oppressed in Brazilian and Venezuelan Guiana, lxxvii.
 — Privileges afforded in British Colony, lxxvii.
 — Peculiarities of Character, lxxvii.
 — Population, lxxv.
 — Republic, Female, lxxxii.
 — Rubber, C. 9.
 — Paint, C. 10.
 Insects of Guiana, F. 7, 8.
 Introduction, vii.
 Invitation to contribute to Paris Exhibition, vii.
 Ituri Wallaba, D. 32.
 Jacamerops Grandis, F. 17 (No. 8).
 Jaguar, F. 10.
 Jumbly Ochro, B. 20, 21.
 Koquerit Palm Fibre, E. 15.
 Kurakai Tree, D. 11.
 Laurel Oil Tree, D. 29.
 — Oil, C. 3.
 — Oil, certain Cure for Liver Complaint, D. 29.
 Lepidoptera Guianensis, F. 7, 8.
 Letter Cases, Indian, E. 35.
 Lime, Bisulphite of, xli.
 Local Exhibitions, viii.
 — Annual ditto, Universal, x.
 — Address to Governor, viii.
 — His Reply, ix.
 Locusts, F. 7, 8.
 — Tree, C. 6, 36, D. 19.
 Macquari Whips, E. 45, 77.
 Macrocerus Nobilis (two), F. 17 (No. 10).
 Mahoe Fibre, B. 5, 22.
 Mahogany Wood and Tree, D. 21.
 Maniballi Tree (Candlewood), D. 12.
 Mariwayana (Purpleheart), D. 30.
 Maswah (Fish Trap), E. 65.
 Matapi (Cassava Squeezer), E. 31.
 Matuli (Sieve), E. 33, 34.
 Meal, Cassava (Bitter), A. 151 to 165.
 — Ditto (Sweet), A. 156.
 — Plantain, A. 157 to 163.
 Medicinal Barks and Plants, lxiv.
 Megas Slag, C. 30, 31.
 Meteorology, xvi., xcii., xciii.
 Metals, Precious, lxxxix.
 Minerals, xviii.
 Mirabunta's Nest, F. 12.
 Miscellaneous Specimens, &c., See Section G.
 Model of Immigrant's Cottages, G. 5.
 Molasses, xlii.
 Monaca Tranquilla, F. 17 (No. 27).
 Monkey's Skin, F. 26.
 Mora Tree and Wood, D. 20.
 — Bark, C. 42.
 — Hair, B. 6, 7.
 Mortality Table, xciii.
 Moths, F. 7, 8.
 Mushrooms, F. 19, 20.
 Namenius Brasiliensis, F. 17 (No. 15).
 Natural History, lxxxiv. to xci. See also Section F.
 — Sir Robt. Schomburgk's Sketch of the Animal Kingdom of the Colony, lxxxiv.
 Navigation, Inland Facilities, xi.
 Necklace, Indian, E. 46, 74.
 Nests, F. 12.
 Neuroptera Guianensis, F. 7, 8.
 Ochro Seeds, A. 187, 188.

- Tabisiri Fibre, B. 4.
 Tallow Vegetable, lxvi.
 Tankiornus Ictercephalus, F. 17 (No. 9).
 Tanning, Barks adapted for, lxvi.
 Tapioca, A. 167.
 Tataboo, or Tataba, D. 33.
 Thamnophilus Doliatus, F. 17 (No. 23).
 Tiger Cat, F. 24.
 Timber remarkably fit for Ship Building, considered superior to Oak, lxxii.
 — Tables of Strain, lxxiv.
 Tobacco Seeds, C. 20.
 Torches, E. 81, 82.
 Trees and their Properties, lxv. to lxvii.
 Trogon Sulphureus, F. 17 (No. 3).
 — Viridis, F. 17 (No. 12).
 Trowers, Indian, E. 40.
 Turanira, Bastard Bully Tree, D. 37.
 Two-winged Insects, F. 7, 8.
 Ubudi Fruit and Wine, lxvi.
 — this fine Fruit unknown in Europe, lxvii.
 Urali, Poison, C. 15.
 Vegetable Tallow, lxvi.
 Vulture, F. 2.
 Wadaduri Tree and Wood, D. 10.
 Wallaba Tree and Wood, D. 35.
 — Bark, C. 3.
 Wamura, or Brow., Ebony, D. 16.
 War Clubs, Indian, L. 47 to 55, 59.
 Warraus Indians, the Builders, lxxviii.
 Warri Warri, Indian Fans, E. 32.
 Wasps, F. 7, 8.
 Weather, xvi.
 Winna Fibre, B. 16.
 Woods for Building and other purposes, lxxii. to lxxiv. See also Section 1.
 Woodskin, or Buckshell, E. 68.
 Work Baskets of Indian Manufacture, E. 24 to 27, 36 to 38.
 Wouralli, Urali, or Ourari Poison, lxxix.
 — Valuable as Antidote to Tetanus and Spasmodic Affections, lxv.

LIST OF CONTRIBUTORS.

*** The Letters and Numbers refer to the Sections in which the Contributions are Catalogued.*

- Barber, S., and E. J. Barr, Heirs of, A. 1, 2, 59, 60.
 Bascomb, H. S. A. 61.
 Beckwith, A. A. 175, B. 1, 20,
 Blair, H. S. A. 46, 62, 63, 64.
 Blank, G. J. G. 3, 4.
 Cæsar, Mrs. A. 186.
 Clark, Mrs. F. A. 95, 111.
 Clementson, Henry, A. 3, 4, 65.
 Colonial Company, A. 5 to 13, 37, 66, 67.
 Cornelia Ida Estate Proprietors, A. 44, 45.
 Correspondence Committee, A. 170, 183, B. 2, 4, 5, 12 to 16, C. 7, 8, 12, 15, 17 to 20, 26, 36, 46 to 48, 55, D. 1 to 20, 23, 30 to 38, E. 3, 70, 71, F. 1 to 6, 10 to 17, 19 to 27, G. 1, 6.
 Daniel, Thos. A. 15 to 18, 47, 68 to 70.
 Davidson, H. and W. A. 48, 49, 71, 72.
 Duggin, T. B. C. 14.
 Dunvin, Sarah, A. 148.
 Elliot and Lorimer, Heirs of, A. 50, 73, 74.
 Ewing, James, and Co., A. 19, 20, 75, 76.
 Fairburn, P. P. B. 9.
 Fauset, Thomas, D. 1 to 20.
 Field, Edmund, C. 30, 31, D. 28, G. 5.
 Fresser, Wm. A. 182, C. 1, 3, 8, 10, 11, 13, 16, 21, 23, 24, 25, 37 to 44, 49 to 54, E. 2.
 Garnett, A. and H. T. A. 22.
 — H. Tinné, D. 21, F. 18.

- Garrat, Robt. A. 70.
 Goring, Emma A. 24.
 — Dr. C. 24.
 Grant, Char. A. 18, 19.
 — P. A. 18.
 Grey, W. A. 15, 16.
 Hamey
 Henr
 Hur. A. 27.
 I.
 — A. 151, 161,
 135, 152.
 — A. 162.
 — A. 134.
 — A. 36.
 — A. 137.
 — A. 98, 138.
 — A. 107.
 — A. 140, 160.
 — A. 141.
 — A. 139, 145, 154, 179, B. 8.
 — Mrs. E. J. A. 99, 108, 112,
 117, 122, 125, 127, 129, 130, 158,
 29.
 — Miss E. J. A. 144.
 — E. J. B. 7, 21, 22, C. 5.
 Jones, John, A. 24, 25, 78, 79.
 Ketley, Rev. J. B. 17, 18.
 Laurie, J., Heirs of, A. 58.
 Leps, J. J. A. 115, 128.
 Lorimer. See Elliot and Lorimer.
 Loxdale. See Steele and Loxdale.
 McCalmont, H. A. 53, 80, 81.
 McClintock, W. C. B. 4, 12, 13, 15, 16,
 23, C. 8, 47, D. 29, E. 1, 3, 5 to 68,
 72 to 82.
 McConnell, John, A. 38, 39.
 McLaren. See Watson and McLaren.
 Melville, David A. C. 4, 4a, 6, 35, 45,
 E. 69, G. 2.
 Meredith, Elizabeth, A. 146, 159, 178.
 Merriman, Mrs. A. 101.
 — Wallace, C. 32, 33.
 Nicholson, P. A. 40, 82, 83.
 Ondermeulen, C. J. Van der, A. 41, 54.
 Pontifex, S. R., A. 84, 85.
 Porter, H., Heirs of, A. 26 to 28.
 Reiss, Miss, A. 103, 123, 142, 147, 163,
 168, 169, 171, 184, C. 27.
 Reiss, Miss E. A. 109.
 Ross, William M. A. 62.
 Russell, J. A. A. 102, 167, 187 to 193.
 — Wm. A. 173, 176.
 Rutherford, W. S. B. 3.
 Sandbach and Tinné, A. 29 to 31, 86,
 87.
 Sargeant, T. M. C. 34.
 Shier, Dr. A. 104, 110, 113, 116, 118 to
 121, 126, 143, 150, 157, 164, 165, B. 6.
 Simon, Benjamin, A. 185.
 Smith and Vyfhuis, A. 43.
 Smith, R. A. 124.
 Steele and Loxdale, Heirs of, A. 32 to
 36.
 Stevenson. See Note, page 13.
 Tinné. See Sandbach and Tinné.
 Vyfhuis, David. See Smith and
 Vyfhuis.
 Watson, P. M., and A. McLaren, A. 57.
 Whitlock, Hubert C. F. 7 and 8.
 Winter, Alex. A. 105, 172, B. 10, 11,
 19.

UNIVERSITY OF CALIFORNIA LIBRARY
Los Angeles

This book is DUE on the last date stamped below.

MAR 12 1953
April 1, 1953
JUL 1 - 1954
MAY 10 1962
OCT 12 1962
NOV. 5, 1962
NOV 27

LD-URL JAN 24 1966

REC'D LD-URL

MAY 19 1969
MAY 14 1969

LD-URL REC'D MEET

MAY 21 1964

MAY 21 1963

REC'D LD-URL

REC'D LD-URL

AUG 27 1963

RECEIVED JAN 30 1983
LD-URL

JUL 8 - 1965
AM PM
7-4 4-9 9-10

BRITTLE REJECTED BY BINDERY

University of California, Los Angeles



L 006 346 378 0

